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January 2, 1961

RAILWAY AGE *weekly*

What Russians Saw In U.S.

...an exclusive interview p. 12

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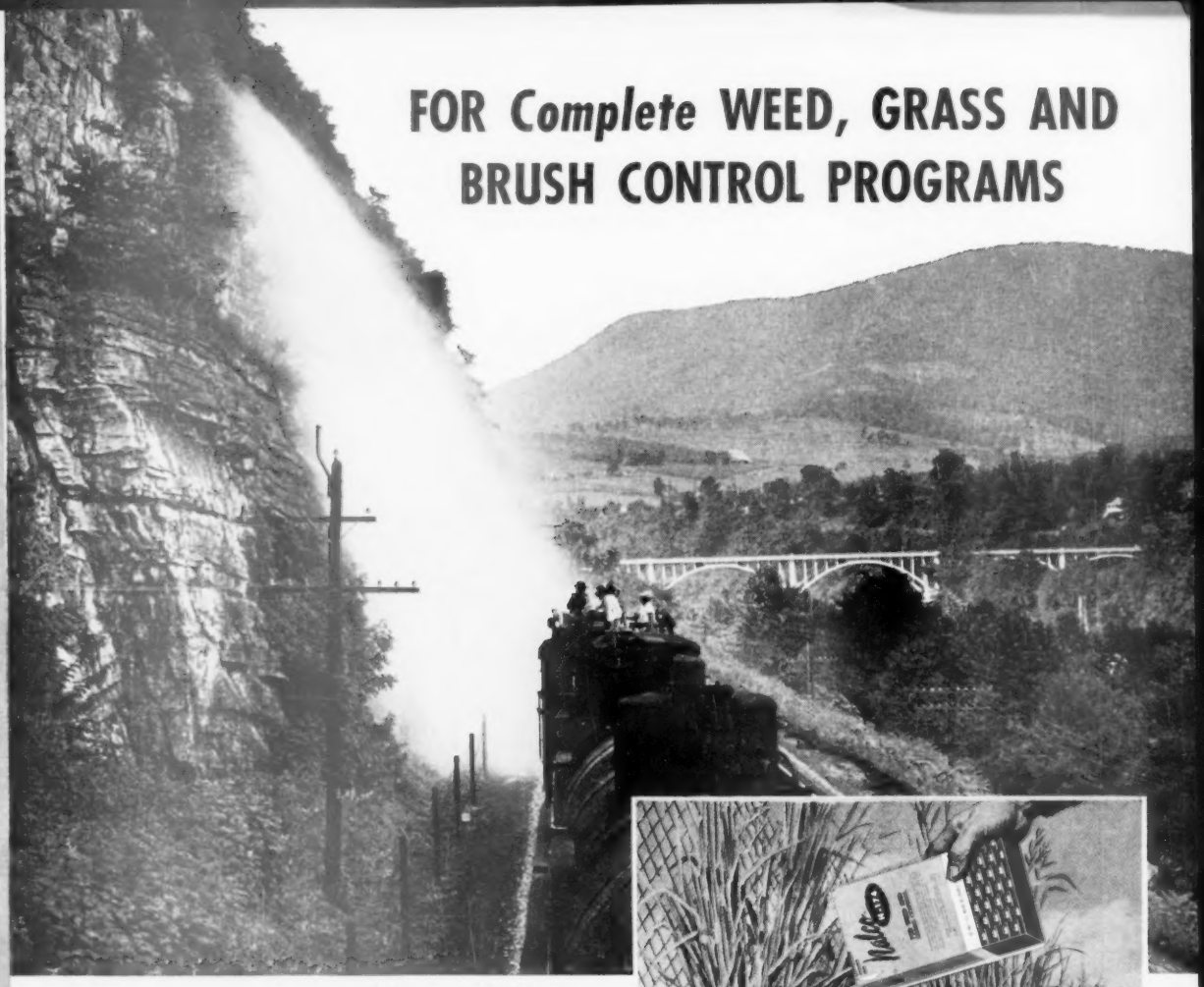

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LOVELAND
REPORTER HERALD
A Paper With Reader Interest and Reader Confidence
LOVELAND, LARIMER COUNTY, COLORADO THURSDAY, SEPTEMBER 13, 1956

Plant Manager Addresses Chamber Workshop

Selby Explains Why H-P Firm Chose Loveland

Ten qualifications were drawn up for the site and community that Hewlett-Packard wanted as the location for a new plant, Stan Selby said when he spoke at the Industrial Workshop conducted by the State Chamber of Commerce in Greeley Tuesday.

Selby, who was named as the manager of the new plant, was given the job of selecting a site for the plant.

Paul Rice, a member of the State Chamber industrial committee was also on the Greeley program. He took part in a panel discussion on "Financing Industrial Parks or Districts."

When Selby listed the 10 qualifications for the company plant location, Carroll Wright of La Junta, who was in charge of the meeting, asked that he list them again as he noticed that almost everyone of the 63 men in the room was writing them down.

The ten qualifications as listed by Selby were:

1. Reasonable labor costs.
2. Available labor.
3. Convenient transportation.
4. Interested community.
5. Acceptable zoning.
6. Acceptable site location.
7. Reasonably priced property.
8. Climate.
9. Culture availability.
10. Tax structure of community and state.

Selby held up the big folder which was about 2½ feet by 3½ feet—which had been prepared by the Loveland Chamber of Commerce and which he had taken to Palo Alto by Bob Hipps and Paul Rice when they made the trip to personally invite the company to come to Loveland. The two men were co-chairmen of the Loveland Chamber of Commerce industrial committee.

Harley Holden was in charge of compiling the folder on Loveland. The large folder contained numerous pictures of Loveland, an airplane view of the industrial park area, letters from city and Chamber officials inviting the company to Loveland, a letter from the [illegible] problems [illegible] Hewlett-Packard industrial plant building.

"A little over a year ago, I was assigned the task of locating a site for my company. I told the Chamber delegates. "During the 21 years of existence of the Hewlett-Packard Co. it had outgrown an 8-acre site in Palo Alto and it was apparent that it would soon outgrow an additional 10-acre site in the Stanford Industrial park. I was instructed to look for a site of 60 acres or more and it should be within the state of California.

"My basis evaluations were made by using data supplied by the U.S. departments of labor and commerce. I also found the magazine, 'Plant Location,' to be very helpful. In it was a page advertisement by the State of Colorado."

"To evaluate the availability of the [illegible] needed proved to be a more difficult [illegible] when the Loveland Chamber of Commerce [illegible] in all surrounding papers, asking for applications from women who would be interested in working in an electronics plant if one were established in Loveland, the results meant much to my company.

"Next was convenience of transportation. Most of our material is moved by truck so nearness to good highways was important.

"It was felt that to be within 25 to 100 miles of a major [illegible] terminal was desirable. [illegible] from Palo Alto by air to the new plant without taking too much travel [illegible]

"The reason [illegible] from a terminal is easily illustrated. To be within 25 miles of New York's international airport isn't very important to [illegible] within 100 miles of Stapleton in Denver isn't too bad. In fact, the Hewlett-Packard Co. has a subsidiary corporation [illegible] Boonton Radio, located [illegible] N.J., [illegible] New York airport, but the company has to maintain a small aircraft [illegible] transport personnel to and [illegible] International [illegible] because the ground transportation is too slow in that area.

"After valuation of the data available on labor costs, labor quality, labor availability and transportation facilities, it narrowed the states that would actually be visited down to Utah and Colorado.

"The following criteria proved to be the real gauge in finally selecting a community: Acceptable [illegible] site location and reasonably priced property.

"By acceptable zoning, I do not mean lax zoning — quite the contrary. An industrial plant should be in a good location where people would like to work just as a new home should be in the right location.

"I couldn't recommend that my company invest several millions of dollars in an area that didn't have fairly stringent restrictions — it would be a foolish investment without some protection.

"Another criterion that proved to be a problem was in finding a physically acceptable site. We wanted a site with a view — after all, we spend most of our waking hours at work, so let's make it enjoyable. Here again we found a number of communities that had established their industrial area on some waste land. Perhaps for some industries this is all right but for an industry that uses a large number of people — a majority of them women—a nice place to work is very important. The industrial park in Loveland has an excellent view of the plains as well as the mountains."

In a question and answer period, Selby said that his company "had not given Loveland any unusual attention until Bob Hipps and Paul Rice called at their Palo Alto plant and personally invited Hewlett and Packard to come to Loveland and presented this (holding the big stiff-backed folder promoting Loveland) folder."

Selby said the fact that so many people in Loveland had contributed to the Industrial Fund, including the school children, [illegible] was apparently [illegible] believing its own [illegible] because there are [illegible] producers in the [illegible] of them operating [illegible] level of capacity [illegible] become a very difficult [illegible] to squeeze a [illegible]

[illegible] momentum of the industry's long-term growth may [illegible] take some of the [illegible] is now clearly [illegible] but this offers [illegible] on for what has [illegible] ing to chemical [illegible] the board.

[illegible]ing is that they will [illegible] to firm up until the [illegible] routine. Though he still [illegible] Boyle around for the [illegible] when he had to be lifted,

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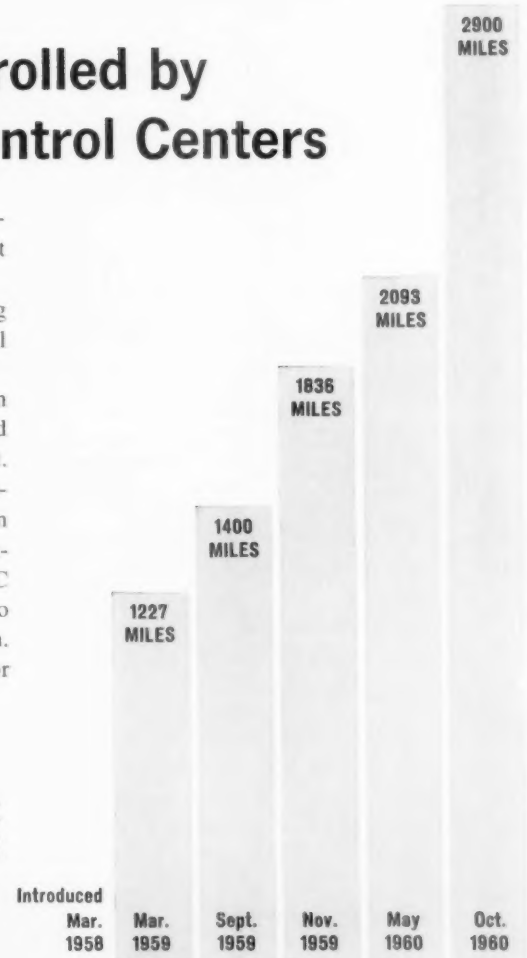

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Week at a Glance

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Class I railroad employment declined . . .

to 743,461 in mid-November 1960, according to the ICC's Bureau of Transport Economics and Statistics. This was 2.16% below October 1960, and 5.20% below November of the previous year.

Government guarantee for another $4.5-million loan . . .

is being sought by the New Haven. Further losses in freight traffic and a recent snowstorm costing the road $1 million have combined with other factors to bring the New Haven knocking again at the ICC's door. The Commission granted the railroad a guarantee for an equal sum in the fall.

Over 700,000 piggyback carloads . . .

will travel the rails in 1961, predicts ACF Industries Chairman William T. Taylor. At present levels, this would be about 3% of all goods shipped by rail.

Teamster demands for a 'royalty' on TOFC moves . . .

will be studied for a year, under contract terms agreed to by one group of Midwest truckers. But if there's no agreement then, the motor carriers will pay a maximum $5 for each trailer handled in a piggyback move. (RA, Dec. 12, p. 51.)

James M. Landis is expected to head . . .

the Office for the Oversight of Regulatory Agencies which his Report on Regulatory Agencies recommended that President-elect Kennedy create in the Executive Department. The oversight office would top various other offices which Mr. Landis also recommended. (See page 8.)

A 5.1% decrease in freight carloadings . . .

during the first quarter of 1961, as compared with the corresponding 1960 period, is forecast by the 13 regional shippers advisory boards.

Trucker profits took a worse tumble . . .

in 1960 than railroad profits. Railroads' estimated net income of $450 million was 21.6% below 1959's. American Trucking Associations estimates that truckers' 1960 net before taxes will be 40% below 1959's, even lower on an after-tax basis.

A modernized car for Philadelphia commuters . . .

is the first step in an extensive program of upgrading service on six PRR and Reading lines. Seven other cars will be renovated this year, and 52 new air conditioned cars are scheduled to be purchased by 1962.

Week at a Glance CONT

Current Statistics

Operating revenues	
10 mos., 1960 ..	$8,026,250,454
10 mos., 1959 ..	8,198,581,085
Operating expenses	
10 mos., 1960 ..	6,348,307,408
10 mos., 1959 ..	6,432,869,535
Taxes	
10 mos., 1960 ..	869,191,013
10 mos., 1959 ..	879,973,498
Net railway operating income	
10 mos. 1960 ..	502,732,957
10 mos., 1959 ..	614,921,615
Net income estimated	
10 mos., 1960 ..	358,000,000
10 mos., 1959 ..	443,000,000
Carloadings revenue freight	
50 wks., 1960 ..	29,565,285
50 wks., 1959 ..	30,061,803
Freight cars on order	
Dec. 1 1960 ...	22,781
Dec. 1, 1959 ...	36,555
Freight cars delivered	
11 mos., 1960 ..	52,115
11 mos., 1959 ..	34,254

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RLEA To Oppose All Mergers

► **The Story at a Glance: The growing trend to railroad mergers "would have numerous adverse effects upon the industry itself, hundreds of communities throughout the nation, and the national economy as a whole." So says the RLEA, in announcing that it will oppose all further mergers in the railroad industry until the present "dangerous" situation has been fully investigated and adequate safeguards are enacted.**

RLEA announced its blanket opposition to mergers following the December meeting of heads of the 23 Standard Railroad Labor Organizations. While the labor chiefs were meeting, merger stories continued to make news.

C&O announced it had 55% acceptance of its offer to B&O stockholders; Lehigh Valley directors accepted an exchange offer by PRR that could lead to eventual merger; C&EI turned down a MoPac offer; Southern asked the ICC for authority to acquire Central of Georgia.

Railway labor believes that the public interest has been ignored in the present rush toward railroad mergers, according to A. E. Lyon, executive secretary of the Railway Labor Executives' Association. Mr. Lyon, in releasing an RLEA statement entitled "The New Threat of Railroad Consolidations—How Proposed Rail Mergers Would Hold Back Efforts to Expand the Economy," said "the pending railroad merger movement benefits primarily the few financial interests which dominate the railroad industry," while it would have broad adverse effects.

To support the charge that wholesale rail mergers would have a depressing effect on the economy, the RLEA statement said: "Nearly all of the railroads presently involved in consolidation proposals are highly profitable properties and not one is in financial difficulties. While the railroads' propaganda claims that 'greater efficiency' resulting from mergers will mean better service and lower rates to shippers, the past history of mergers shows that just the opposite is usually the result."

The adverse effects of railroad mergers, the association said, would stem from five factors: weakening of the base for economic expansion, decline of competition and growth of monopoly, reduction of service, loss of economies of rail transport and the loss to railroad labor.

The economies of rail consolidation, RLEA said, "are founded on widespread reductions in railroad employment through the curtailment of service. If the consolidations now planned are effected, tens of thousands of railroad workers will be separated from their employment at a time when hundreds of thousands of railroad employees already have lost their jobs for other reasons. From 1951 to 1960 employment on Class I carriers has fallen by about 500,000, a decline of about 40%. In the five years since 1955 employment has declined by about 26%. In 1960 employment on Class I railroads is estimated to average between 780,000 and 785,000 compared to 1,276,000 in 1951.

"Part of this decline," the statement continues, "arises from the substitution of machinery for workers, the processes known as automation and mechanization. Another factor in the decline of employment stems from the loss of business, due both to the inability of railroad management to adopt competitive pricing and merchandising policies and to the general decline in business and industrial activity."

These processes can be reversed, RLEA contends, by generating more traffic through mechanization of operations and more aggressive pricing, while unemployment stemming from a business slump "can be eliminated by national policies encouraging business and favoring economic growth.

"On the other hand," RLEA continues, "there is no reversal of unemployment brought about by the 'economies' of consolidation," since this unemployment results from the termination of service to vast areas and the scrapping of railroad facilities and equipment.

Overriding the personal interests of railroad workers, though, RLEA said, was the effect on the economy as a whole. RLEA charged that, if the present merger trend is not halted, the railroads will be unable to handle the greater traffic predicted for the

(*Continued on page 32*)

Shumate Succeeds Marks as RF&P Head

STUART SHUMATE

W. P. MARKS, JR.

Stuart Shumate, former vice president and general manager of the Richmond, Fredericksburg & Potomac, became president of the road effective Jan. 1. Mr. Shumate, 45, succeeds Wirt Peebles Marks, Jr., 67, who retired after serving as president since Aug. 1, 1957.

The new RF&P president joined the Pennsylvania as an engineering apprentice following his graduation from Virginia Polytechnic Institute in 1936. In World War II he served with a railway battalion in Europe. He returned briefly to the Pennsylvania in 1946, then joined the RF&P as supervisor of track. He was named superintendent of Potomac Yard at Alexandria, Va., in 1950; he became general superintendent Jan. 1, 1955. He was appointed vice president and general manager July 1, 1957.

Mr. Marks, prior to becoming RF&P president, had served as general counsel for the company.

Landis Urges Reorganization

► **The Story at a Glance: President-elect John F. Kennedy has received a report recommending more Presidential attention to regulatory agencies, including the ICC, which the report puts among the agencies "principally calling for reorganization."**

The report came from James M. Landis, New York attorney and former dean of Harvard Law School, who served in New Deal days in chairmanships of two regulatory commissions—Securities and Exchange Commission and Civil Aeronautics Board.

The Landis recommendations stop short of calling for a Department of Transportation at Cabinet level, but they do call for creation of an Office for the Development and Coordination of Transportation Policy within the Executive Office of the President.

Recognizing the status of the regulatory commissions as agencies of Congress, the report concedes that legislation would be required to implement some of its recommendations. At the same time, it says that many of the objectives it sets up can be accomplished by Executive direction or action of the agencies themselves.

The importance which President-elect Kennedy attaches to the regulatory set-up was emphasized by his promptness in requesting Mr. Landis to make the study out of which the present report came. The request was made within a few days after the election.

Among recommendations made by Mr. Landis are these:

- Secure for the President from Congress the right to propose reorganization plans, subject to veto by concurrent resolution of both houses of Congress.
- Propose a reorganization plan for the ICC whereby its chairman will be designated by the President and serve as chairman at his pleasure.
- Propose reorganization plans for the ICC . . . which will make clear that

Watching Washington *with Walter Taft*

• **THE PRESIDENTIAL COMMISSION** appointed by President Eisenhower to study the railroad industry's dispute over working rules will hold an organization meeting in Washington this week. But its study is not expected to be under way until around Feb. 1. That prospect is indicated by plans of the commission's chairman, Secretary of Labor James P. Mitchell, to continue in his cabinet position until the Eisenhower administration goes out of office Jan. 20.

THE DISPUTE arose out of the railroads' call for an end to "featherbedding," and the agreement to submit it to a Presidential commission came out of meetings Secretary Mitchell held with representatives of management and the op unions (RA, Oct. 24, p. 9). The commission's report is due Dec. 1, 1961, but there is provision for an extension "not to exceed 90 days."

SECRETARY MITCHELL was appointed by President Eisenhower to the chairmanship of the 15-member commission. The secretary will also serve as one of the commission's five "public" members. The other four are Francis J. Robertson, Washington attorney and arbitrator, and three members of college faculties—John T. Dunlop of Harvard, Charles A. Myers of Massachusetts Institute of Technology, and Russell A. Smith of the University of Michigan. The other 10 members are management and labor representatives—five of each.

MANAGEMENT REPRESENTATIVES are Daniel P. Loomis, president of the AAR; Guy W. Knight, director—labor relations, PRR; and three railroad vice-presidents—T. A. Jerrow of GN, J. E. Wolfe of CB&Q, and B. B. Bryant of C&O. Labor representatives are A. F. Zimmerman, assistant grand chief engineer, BLE; S. C. Phillips, assistant president, BLF&E; and vice-presidents of the other three op unions—S. W. Holliday of ORC&B, H. F. Sites of BRT, and James W. Fallon of SUNA.

ONE MEMBER of the commission, Professor Dunlop, was a member of emergency board No. 109 which inspired the rules-modification movement. That was a 1955 board which recommended establishment of a commission to review and modernize the op wage structure. The present commission is directed by the labor-management agreement to proceed "in general conformity with recommendations of emergency board No. 109." The pact, however, contains another provision stipulating that the 1955 board's report "shall have no binding effect upon its findings and recommendations."

PRESIDENT EISENHOWER predicts that appointment of the commission will "prove to be a significant achievement in the progress of labor-management relations toward greater maturity and stability." The President was "particularly pleased" that Secretary Mitchell agreed to accept the chairmanship and thus provide "additional and significant service in the cause of industrial peace."

• **REVISED** accident-reporting rules of the ICC will apply to all accidents occurring on or after Jan. 1. The revision brings rules for reporting accidents to employees into line with the accident reports act passed by Congress last year.

TWO BASIC CHANGES are involved. One is a broadened scope rule requiring the reporting of all accidents occurring in connection with all usual activities of a railroad company. The previous scope rule undertook to confine reportable employee casualties to those relating to operation of the railroad. The other change makes an accident reportable if it disables an employee for 24 hours. This was 72 hours in the previous rule.

# of ICC and Other Agencies

the chairman's authority extends to all administrative matters within the agency, including responsibility for the preparation and review of its budget estimates, the distribution of appropriated funds according to major programs and purposes, and the appointment of all personnel, except: (1) those whose appointment is by statute vested in the President; (2) division heads whose appointment must be confirmed by a majority of the agency members; (3) special assistants, not in excess of three, to each of the members, which appointments shall be made by the respective members.

• Propose reorganization plans . . . for the delegation to panels of agency members, single agency members, or boards of employees, for final determination all adjudicatory matters subject only to discretionary review by the agency *en banc* on petition by a party in interest.

• Create within the Executive Office of the President with appropriate powers an Office for the Coordination and Development of Transportation Policy to develop and implement the national transportation policy. This should be accomplished by a reorganization plan transferring to this office all the responsibilities now vested in the Undersecretary of Commerce for Transportation.

• Create within the Executive Office of the President with appropriate powers an Office for the Oversight of Regulatory Agencies which will assist the President in discharging his responsibility of assuring the efficient execution of those laws that these agencies administer.

• Impose upon the Office for the Oversight of Regulatory Agencies the duty to prepare for the President detailed reorganization plans for the regulatory agencies with prime emphasis on the Federal Power Commission, the ICC, the CAB, and the Federal Communications Commission.

• Issue an Executive Order dealing with the ethics of government employees and their duty to reject and refrain from receiving *ex parte* presentations in pending matters before them.

The proposal that the Undersecretary of Commerce for Transportation be supplanted by a Presidential Office for the Coordination and Development of Transportation is based on Mr. Landis' conclusion that an office capable of dealing with transport problems "cannot be subordinate to the Secretary of Commerce, for its responsibilities are vaster and more important than all the other functions vested in the Department of Commerce." His position that the time has not come to establish a cabinet-level department of transportation is summarized by Mr. Landis as follows:

"The evolution of a national transportation policy must have a close and intimate relationship to the President. To do so by the creation of an executive department, however, means the imposition of presently undefined executive duties in the head of that department. These duties could probably be more defined at a later date in the light of experience and then vested without too much controversy in an appropriate governmental unit."

Much of the report's section on the ICC is argument in support of the recommendations that the Commission's chairman be appointed by the President and that the chairmanship be strengthened. There is also comment on other phases of the Commission set-up and activities, including opinion-writing.

"Opinions of the ICC," the report says, "are presently in the poorest category of all administrative agency opinions. Their source is unknown and the practice has grown up of parsimony in discussing the applicable laws in making a determination. Lengthy recitals of the contentions of the various parties are made as a prelude to a succinct conclusion devoid of real rationalization. . . . Individual commissioners must be assigned the responsibility of expressing the conclusions of the Commission. They will, of course, need help and appropriate help in the nature of law clerks such as are now assigned to federal judges, rather than the present practice of temporarily assigning attorneys from the staff of a bureau."

As to the present personnel of its regulatory agencies, Mr. Landis' summary comment is this: "It is generally conceded by most observers that since World War II a deterioration in the quality of our administrative personnel has taken place, both at the top level and throughout the staff."

A "prime criticism" of the regulatory agencies, as Mr. Landis put it, has been the allegation that they failed to go in for enough planning and policy development in areas subject to their jurisdiction. The report went on to identify transportation as "the most obvious of these areas." It added:

"Planning to deal with the inevitable impact of increased competition on both long-haul and short-haul freight and passenger rail transportation has been minimal. Bureaucratic obstacles to the abandonment of unprofitable intercity service became so severe and so unrealistic that the Transportation Act of 1958 sought in a way, perhaps too severely, to cut the Gordian knot.

"The problems of the shorter-haul carrier, such as the New Haven Railroad, could be seen long in advance but plans to deal with the problem as such have not yet been devised. The general deterioration of rail service, particularly on the Eastern roads, goes on apace, yet its tie-in with rates and financing is still to be determined. Such solutions as have been devised are piecemeal in character and bold and imaginative thinking is lacking. Commodity tariff classifications still reflect an economy whose changes have made many of them obsolete."

Meanwhile, the report set out a "tentative program" for the proposed new transport office. It included immediate and longer range objectives. Among

(*Continued on page 19*)

RRs Weather Deepfreeze

Temperatures ranging from 10 to 25 degrees below zero put the Chicago area in a snowy deepfreeze during the week before Christmas—but the railroads kept running with a minimum of embarrassing moments. To be sure, wire trouble brought delays to the electrified lines. Equipment failures plagued other commuter roads in scattered instances. An NYC through passenger train quit cold in Kankakee, Ill., with frozen steam pipes. But overall, the rails' performance was good. Late-to-work commuters could blame the railroads in some cases—but in others there was some question whether it was the carriers or that second cup of steaming coffee that really caused tardiness at the office.

Commuters, martyrs to the good suburban life, had their usual gripes as they huddled close to station heaters and ventured onto station platforms only after the train pulled in (thereby accounting for a good share of the late minutes posted by suburban trains). But even the occasional commuter, normally first to complain and hardest to satisfy, didn't sound off too loudly. After all, the trains were running. And in so many cases the family (or company) car groaned once and expired.

Effective January 1, 1961

Lenkurt® marketed

400 NORTH WOLF ROAD, NORTHLAKE, ILLINOIS • TELEPHONE: 312-FIllmore 5-7111 • TWX: MAY-3459

AUTOMATIC ELECTRIC SALES CORPORATION

December 15, 1960

TO OUR CUSTOMERS AND FRIENDS

More than fifteen years ago Lenkurt Electric Co., Inc. selected us to introduce to you their carrier systems. Since that time it has been our privilege to offer you their expanding line of communications equipment of highest quality, designed and produced to meet your exacting standards for dependability, ease of maintenance and low cost operation.

It is now desirable that Lenkurt Electric integrate all of the marketing function with their design, development, engineering, and production activities to provide you with the maximum possible benefits and service from their organization. We are happy to cooperate with Lenkurt Electric in this integration. To this end we are pleased to announce that our Carrier & Radio Staff, who have had the pleasure of serving you, will become a part of the Lenkurt organization on January 1, 1961, and will continue to serve you.

We wish to thank each of you for your increasing purchases of Lenkurt equipment during the last fifteen years. We are confident that your future purchases of Lenkurt equipment will be attended by even greater services and benefits.

Yours very truly,

D. H. Deaver

D. H. DEAVER
President

DHD:ag

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LENKURT ELECTRIC CO., INC.

1105 County Road, San Carlos, California • Telephone: 415 LYtell 1-8461 • TWX: S CAR BEL 100

December 15, 1960

TO OUR CUSTOMERS AND FRIENDS

Effective January 1, 1961, Lenkurt Electric Co., Inc. assumes the responsibility for marketing Lenkurt products and services to customers formerly served by our distributor Automatic Electric Sales Corporation. The resulting integration of all phases of our corporate operations should provide maximum benefits to you.

We are fortunate that Lenkurt Electric's established marketing organization will be augmented by Automatic Electric's Carrier & Radio Staff which has ably represented our products, services, and engineering skills for the past fifteen years. The services of this group will continue to be available from existing field offices.

Existing orders not shipped by January 1, 1961, will be transferred from Automatic Electric to Lenkurt Electric and after that date all new orders should be placed directly with Lenkurt Electric. All warranties now in effect with Automatic Electric will be transferred to and honored by Lenkurt Electric.

We welcome this new opportunity to serve you, and by our performance continue to merit the faith and confidence that you have exhibited in our products and our services.

Yours very truly,

John J Douglas

J. J. DOUGLAS
President

JJD:hb

What Russians Saw

Russian railroaders have gone home —hailing the value of their visit and heaping only faint praise on the accomplishments of U. S. railroads.

Were they as unimpressed as their parting comments indicated? Probably not, according to American railroaders who watched the Russians everywhere snapping pictures and taking notes, gluing themselves to demonstrations of equipment at the AAR research lab and intently studying the operation of high-speed trains in electrified territory or the design of C&NW's push-pull suburban streamliners.

Would the Soviets consider buying any U. S. equipment which they saw? Perhaps—but it would take more study. And besides, "we weren't asked."

The 10-man Soviet delegation's month-long tour of U. S. railroads returned a visit made to Russia by eight American railroaders last summer. The whole program was part of a scientific, educational, technical and cultural exchange established by agreement between the two countries in 1959. Both teams of railroad experts have termed it a valuable exchange.

When B. Beschev, Minister of Railways, talks of U. S. railroad progress, however, he compares it—or contrasts it—to Soviet advances. And he's firm: where the Russians aren't ahead now, they will be before long.

Here, in an exclusive interview with Railway Age, Mr. Beschev gives his views on railroading, Yankee style, and how it compares with practices—and plans—in the Soviet Union.

Q. Mr. Beschev, what single thing impressed you most about U. S. railways?

A. Positive features are the wide application of diesel motive power, the exclusive use of four-axle freight cars, large railroad buildings at some stations, the use of electronic machines for various operations such as accounting. At the same time, the conviction grew among members of the delegation that technical equipment on American railways is being insufficiently utilized. Rail lines in this country are inadequately loaded and rolling stock is being utilized ineffectively. It is apparent in connection with this that the further improvement of a quantity of technical equipment is being delayed. While there is wide use of diesel traction, electric, which is more advanced, is being introduced at a slow rate.

Arriving at such a conclusion, we have no doubt that the Americans attach some priority to this problem. During numerous conversations with your specialists, we repeatedly had to listen to statements of a similar nature.

Q. Did you see any U. S. railroad practices which are not now being followed in the USSR but which you think might be applied there?

A. To be in such a country as the United States for a month and to become acquainted with one of the largest railway systems in the world and not to observe anything new and interesting could be done only by a blind person or by one who understands absolutely nothing in this field. For example, a good impression was made by the partially automated sorting [classification] work at the Pennsylvania's Conway Yard, the use of calculating devices for a number of operations on the New York Central, the new types of passenger cars for suburban routes.

At the same time, the use of various types of technical equipment with which we became acquainted is not necessarily applicable in our circumstances. Among these should be included the accounting by number of rolling stock, the use of narrowly specialized platforms for piggyback (some of which are unnecessarily bulky). Also, there does not occur with us the necessity of using equipment for the control of the overheating of journal bearings, since the use of such control on U. S. railways has apparently been a consequence of a late introduction of lubricator pads—which have been used by us for 30 years. Moreover, we are conducting considerable work in the transition of rolling stock to roller bearings.

Q. Did the U. S. railways you visited appear to be technologically well advanced? Or did you observe procedures which impressed you as being inefficient or old-fashioned?

A. The technical equipment is basically appropriate to the existing level of traffic. [But] together with the use of new technical equipment, obsolescent equipment is also being applied.

Q. How do U. S. railroads' technological research facilities— in Chicago, for example—compare with those of the Soviet Union? Are the two countries pursuing any similar lines of railroad research?

A. We are able to judge the conditions for scientific research work in the U. S. on the basis of a visit to the Chicago [AAR] Research Center, which was of great interest to us. The opinion of members of the delegation was that scientific research investigations at that center can be considerably broadened.

In our country, scientific research work in the railway field is done at the Central Scientific Institute of Railway Transport and at 12 institutes of higher education for transport of the Ministry of Ways of Communication, which engage in this work simultaneously with the training of railway transport engineers. Very serious research is being conducted on locomotives and rolling stock, on the improvement of freight movement, the organization of freight flow, train schedules, the improvement of production technology.

Q. What is your general impression of U. S. freight cars? Is the trend toward specialized cars in the U. S. evident also in the USSR?

A. On the whole, the freight cars of American railroads produce a good impression. Our railways are approaching the specialization of freight cars quite cautiously, since we consider that it is, on the whole, logical to produce universal cars—which leads to a reduction of breakdowns and to an increased utilization of cars, as well as to a reduction of capital investment and operating expense.

Q. How do you regard U. S. mech-

in U.S.—an Exclusive Report

anized track maintenance procedures?

A. Unfortunately, we were not provided the opportunity to see powerful machines for laying railroads such as are utilized in the Soviet Union—assembly and dis-assembly cranes for work with panels using reinforced concrete ties, ballasting machines and so forth. Technology is widely applied in the U. S. in rail construction and maintenance work but the capability of the units is less than in the USSR.

Q. What are your views as to the large freight yards which are used extensively in this country? Does the automatic yard as you observed it here lend itself to use by the Soviet railways?

A. Soviet railroads pay considerable attention to classification yards and we feel that the improvement of the operation of these yards and the introduction of new techniques is an important means for shortening the turnaround time of cars and speeding up the delivery of goods. We are successfully carrying out the automation of classification work. During the postwar period the following have been introduced: automatic centralization of humping with the selection of through trains in advance, automatic shoes for retarding of cars being coupled, control of the track occupancy, an installation for automatically weighing a car while it is moving, and radar units.

However, it must be kept in mind that the demands on our classification yards have increased so that they must handle many times more cars than American classification yards.

Unfortunately, we were not able to see intensively working classification yards on the American railroads and it is therefore very difficult for us to decide whether or not it is possible for us to use American experience in the field.

[In response to another question, Mr. Beschev noted that "various elements of the automation of the work of sorting humps and also the new equipment of dispatcher centralization [CTC] which the members of the delegation saw in Rochester and Chicago produced a good impression on us. This equipment seems more or less modern and close to the constructions utilized in the USSR."]

Q. How do U. S. passenger trains compare with Soviet trains in speed, comfort, newness?

A. In order to judge which passenger trains are better—Soviet or American —it is necessary not only to become acquainted with them in detail, but also to experience their qualities oneself under railway conditions. We can judge best concerning the sleepers used in through service, and since we have no doubt that the Association of American Railroads selected for our trip the best type of car, we have the very finest impression of the masterpieces of American car construction. In this connection, we can convey to you the unanimous opinion of all the members of the delegation—an opinion formulated on the basis of many days of traveling in this car—that Soviet through-service cars are considerably more convenient and comfortable than American.

At the same time, one must not overlook the successful construction of air conditioning, the fine lavatories in the two-person bedrooms, the comfortable sleeping berths. Passenger trains equipped with seats with reversible backs and the cars with swivel armchairs pleased us also. Speed of passenger trains is somewhat higher in the U. S. than in the USSR.

The passenger stations which we saw were large and quite comfortable, although they were built, in the main, a fairly long time ago. The small flow of passengers proceeding through the stations attracts attention.

Q. Do "average" U. S. railway workers appear to be well off by USSR standards?

A. Regarding wage rates of the American and Soviet railroad workers, it is very difficult to make any nominal comparisons, since it is necessary to consider an entire complex of indices from which the standard of living is composed. Thus, for example, the apartment rent of a Soviet worker amounts to 4% to 5% of his wages. A law has recently been adopted concerning the elimination of all types of taxes from the population. Medical service is free for Soviet citizens. The Soviet Union has the highest pensions in the world.

In the USSR, the majority of workers of the railways are members of a trade union. Trade unions play an enormous role in our country, pursuing a great organizing and educational labor among the workers. They supervise strictly the fulfillment of established labor legislation. All service relocations and dismissals must obligatorily be agreed upon beforehand with the local trade union organization. By means of the system of production communications, organized by the trade unions, the workers participate actively in the organization of the work of their enterprise.

Q. How does the rate of pay for railway employees in the USSR compare with rates for other kinds of employment?

A. Wages on the railways depend on the specialty or profession, and are either by hour, by piecework or by progressive-piecework. Wages are paid in currency twice a month. Railway workers' wages, if one considers them and compares them according to qualifications, are almost comparable to wages in industry.

Q. What methods are used by Soviet railways to educate employees in safety?

A. There exist special regulations concerning safety techniques which are approved by the Ministry of Ways of

Riders on Train Tops? 'Nyet!'

U. S. railroad men, accustomed to running the nation's safest means of travel, came home from Russia with a shocker. People, they said, were riding atop passenger cars—in, of all places, electrified territory.

So Railway Age went to Minister Beschev. And he scoffed it off. Such stories, he declared, are "invented—if not worse." Not since the days of the Revolution have people ridden atop passenger cars.

Then AAR Vice President Curtis Buford put on an office-movie show for the Soviets. It included one scene which plainly showed two men, apparently standing on car end ladders and riding waist-high above the car roof. The location: a point near Tiflis in the Caucasus—where locomotives draw their power from wire carrying 3,000 volts DC.

The reported reaction from one Russian: an amused grin; and the comment: "Well, it must have been too hot in the cars."

Communication and the Central Committee of Trade Unions. The elaboration and control of these rules is headed by special administrations in the Ministry and by the division of safety technique in the trade unions, together with an appropriate staff of special inspectors.

Q. Did you see any equipment manufactured in the U. S. which you would like to purchase here? Track maintenance equipment, or push-pull passenger equipment, for example.

A. First, it would have to be suggested before we could consider buying. It would be necessary to study more thoroughly. To give a right and definite answer is a very difficult thing. We had a very quick sight of your equipment.

Also, we saw no industries here. When we visited the British railways we usually met some industralists who suggested that we buy something. But we couldn't buy much in the United Kingdom—we saw little new and modern equipment, in comparison to our own.

We saw your track machines and they are not bad machines. But we are deciding our problem of track maintenance in a different way—by the complex maintenance where one or two big machines make all operations. Our traffic density does not allow plenty of time for such work. So we must have more efficient machines.

Q. Did you notice any evidence of waste—or duplication of effort by competing railway lines—during your tour of the United States?

A. It is difficult for us to answer this question concerning the conditions caused by competition, since in our country—where the entire economy is based on socialist planning—there is not and could not be competition.

Q. Many U. S. railroads are studying merger, in the belief that more efficient operation may result. Is it the Soviet view that maximum efficiency results from your regional setup, or is there a trend toward fewer regions?

A. There has been accomplished recently a merging of a number of railways and branch roads. This has provided positive results, both from the point of view of the organization of freight haulage and the use of technical facilities, as well as the economizing of operating expenditures.

Q. How are freight cars assigned to the various regions in the USSR?

A. The railways and the freight cars, just as other property, belong to the state. In this connection, those difficulties which there are in the U. S. regarding the return of cars to railroad owners—we do not have these problems in our country. The Administration of Movement of the Ministry has the opportunity to regulate the distribution of freight cars among the railways, depending on their requirements.

[Later, Mr. Beschev referred again to the U. S. car distribution system. He called it "complicated," but said that the delegation believes the AAR makes a great effort "to do it well, to do it better." Then he added: "Here is the essence of transportation—the efficiency of every car. [In this] U. S. roads do a lesser job."]

Q. It's been reported that cars in the

For the Record

AAR Vice President Curtis Buford, who headed the U. S. railroad delegation to the Soviet Union last summer, accompanied the USSR delegation on its reciprocal tour of U.S. railroad installations in November and December 1960. Mr. Buford offered the following comments on some of Mr. Beschev's replies to Railway Age's questions:

Equipment utilization: "While the Soviets truly recognized the great unused capacity in the American railroad fixed plant, their method for imposing intensive utilization in the Soviet Union is not acceptable to American railroad patrons. For example, in the Soviet Union shippers and receivers are permitted an average of three hours free time to load or unload freight cars, after which heavy fines are imposed for delay to freight cars. This method produces quick turnaround of cars in industrial plants. American railroads on the other hand invest large sums to provide facilities and equipment for better service to their customers, a factor which is of little concern in the Soviet Union."

U.S. vs USSR practices: "No car records are kept by the Soviets on the movement of their cars, again relating to the lack of need for customer services. So far as lubricator pads are concerned, these devices were known and in a stage of development 30 years ago in Europe and the U.S. as well. The Soviets have selected one pad for general usage which our experts consider to be inferior in quality and design to the various styles of pads for different purposes now available to American railroads. Furthermore, American railroads have installed lubricator pads on 1,201,000 cars, or approximately 56.2% of the serviceable fleet. Many of the cars we observed in the Soviet Union on the other hand used waste-packed journal boxes.

"With regard to roller bearings, so far as we were able to learn from the Soviets they are having considerable trouble settling upon a final roller bearing design for freight cars. On the other hand, the American railroads have already equipped approximately 50,000 cars with roller bearings of dependable design."

Technology: "While the Soviets are still building single side wooden sheeting freight cars for use on the Soviet railways, American railroads have been building all-steel cars of widely diversified special characteristics for many years. The American railroads have been completely dieselized while the Soviets are still operating with 67% antiquated steam power. While behind the Iron Curtain, we did see an American steam engine in use at the Warsaw Union Station."

Research: "The American railway delegation visiting in Russia was in fact very impressed with the extensive research effort in the railroad industry to develop improved methods and tools. On the other hand, research in the American railroad industry is carried on in many different ways including, in addition to the AAR Research Center, the research facilities of many railroads and many suppliers and manufacturers of railroad equipment. In the opinion of the American railroad delegation, the results of the research on the two railroad systems show a far greater advance in the quality and usefulness of tools and procedures for railroad operation in the U.S. The fact is that a much higher degree of modern equipment has not only been developed but is in use on American railroads."

USSR are utilized more intensively than they are in the U. S. How is this increased utilization accomplished?

A. The optimum utilization of transportation methods is a result of our socialist planned system, which envisages a proportioned development of all branches of our peoples economy, including railway transport. You have the capitalistic system, the private railways, and the achievement under these conditions of such a utilization of technical facilities is not offered a possibility. Moreover, the better utilization of freight cars in the USSR is achieved by a more accurate direction of all operational work.

[Mr. Beshchev referred once to some few Soviet operations which "go like the capitalists—without good planning." But, he said, "we build based on comprehensive socialist planning." In Russia, he noted, railway transport "is a fundamental form of transportation, whose share of all freight haulage is 85%. The cost of freight on the railways is considerably lower than by auto transport."]

Q. In the event freight is damaged while in the hands of the railway, how are complaints made and how are such matters settled?

A. There exists in the Soviet Union a special document, "The Charter of Rail Ways," according to which there is envisaged the procedure for the mutual responsibility of the railways, the shippers and the receivers. In the Ministry, a special commercial administration is engaged with these problems. When there are differences of opinion between clients and the roads, a final decision is achieved by arbitration.

Q. Did you see everything you asked to see in the U. S.? Were all your questions answered? Were any restrictions placed on you during your visit?

A. In our opinion, the best answer to the question as to whether we saw everything we asked to see is our sincere gratitude to the AAR and above all to its vice president, Mr. Buford, for the organization of our big and interesting trip through the United States . . .

However, since we have been asked concerning objections regarding the organizers of our trip, the members of the delegation expressed their regret concerning the changes in the itinerary, which, in our opinion, were without foundation and which were not coordinated with us, as a result of which we were deprived of the opportunity of visiting New Orleans and instead spent almost 40 hours in the railway car.

It is, of course, also a pity that our locomotive engineers were not shown the promised gas-turbine engine and the production of new locomotives, and that the specialists on signals and communication were refused the short trip to Indianapolis.

However, these objections are not the main thing. The most important point about our trip is that this exchange of delegations of specialists of railway transport promoted the strengthening of businesslike friendship between the Soviet and American peoples.

For statistical comparison of U.S. and USSR railroads, see page 32.

Mechanized track maintenance: "Track maintenance equipment in the two countries has developed along different lines. The American method involves the use of lightweight equipment capable of high production per man-hour and easily removed from tracks. The Soviet development, on the other hand, is geared to the replacement of panel track sections 25 meters in length. These panels are handled by Platov track-laying cranes capable of lifting from the track and handling to and from storage racks a complete track panel consisting of two 25-meter rails and attached concrete ties. Thus large, heavy, highly expensive equipment is utilized, requiring more man-hours for production than is customary on American railroads. The panel track method, of course, produces opposite rail joints which in turn produce rough-riding track and high current maintenance costs, neither of which is characteristic on American railroads where joints are laid in staggered position. American railroads discontinued opposite joint construction for main line track over 40 years ago."

Classification yards: "The Soviets told us that they have provided automatic retardation procedures to just one retarder unit in one yard in the Soviet Union taking care of one group of six classification tracks. This retarder was shown to us at Losinostrovskaya near Moscow. On the other hand, American railroads have completely automated retarder operations for many complete railroad yards.

"The Soviets visited Potomac Yard of the RF&P at Alexandria, the Frontier Yard of the NYC at Buffalo, Conway Yard of the PRR at Pittsburgh, and the Bensenville Yard of the Milwaukee at Chicago. All of these yards are capable of consistently humping in excess of 150 cars per hour at a long-time sustained rate and do so during periods of peak freight traffic. No yard we were shown in the Soviet Union was claimed to have this much capability by the Soviets."

Passenger trains: "The Soviet delegation traveled in a modern lightweight 10-roomette, six-double bedroom sleeping car in the U.S. This is a car in wide usage here. The Soviets pointed out the excellence of construction and air conditioning and convenience of lavatory facilities characteristic on American railroads and not furnished on the Soviet railroads . . ."

Workers' wages: "It is true that the standard of living in the two countries must be evaluated to relate it to wages. The standard of living in the U.S., in the opinion of the American delegation, was far higher than the average existing in the Soviet Union. On the other hand, the relative economic position of the railroad workers with relation to other industries is comparable in each economy."

Itinerary: "The Soviet itinerary in the U.S. was based on what the American group saw in the Soviet Union. This exchange did not include the manufacturing of railway equipment on either side. It is our view that the exchange was beneficial to both sides from the standpoint of learning the methods used to solve common railroad problems and also from the standpoint of providing better understanding between groups of people from the two countries. The American delegation was strongly impressed by the recognition given to the importance of railroad transportation in the development of the economy of the Soviet Union."

VISUAL REDESIGN

CN Begins Major Campaign to

► **The Story at a Glance: A major face-lifting is on the books for North America's biggest railway system. Canadian National has launched a long-range program aimed at improving the public's impression of the company.**

The public thinks of railroads—including the CN — as outmoded and possibly obsolete, CN says, adding that this is not only an unreasonable attitude but also one that depresses earnings. Having spent a billion dollars in the last ten years on a massive modernization program, CN thinks it has a legitimate interest in seeking to be regarded by the public as a "modern company on the move." So it is now taking the first steps in a "visual redesign program" that CN hopes will eventually change the public's attitude toward the 24,000-mile railway plus hotels, communications, truck transport and marine operations that make up the whole Canadian National System.

What does the man in the street think of your company? Are you obsolete, in his opinion, or does he regard you as being up to date? Does your corporate image help your business—or hurt it?

Motivation research is asking these questions and others like them in a broad range of business activities these days. More and more, companies looking for increased profits are finding it pays to take a careful look at the answers motivation research—the new science of finding out why people choose certain products and services rather than others—is coming up with. And a number of firms, not satisfied with the picture the public has of them, are taking steps to improve their images.

In railroading, the problem has been given little attention. Railroaders, preoccupied with other pressing problems, have generally tended to assume that the public would automatically regard them with favor if trains ran on time and the railroads could keep out of the newspapers.

Canadian National has had a good reputation for reliable, on-time operations. Nevertheless, when CN's Public Relations Department made a comprehensive survey of public attitudes in the summer of 1958, they found, according to public relations director Charles Harris:

"This survey confirmed that Canadians have a pretty poor impression of the railway industry. Those interviewed rated it low on progressiveness. Specifically, they thought railways were slow about experimenting with new methods or services. They also gave railways few marks for any real efforts to better their performance or improve their service to the public.

"The survey's findings made it clear that Canadian National was getting little credit publicly for the billion dollars it had invested since 1950 in modernizing its equipment and methods. This investment is reflected in such improvements as dieselization, centralized traffic control, new microwave facilities, Telex, integrated data processing, training programs, modern electronic hump yards and other innovations."

As Mr. Harris points out, in most industries it would be axiomatic to give the most careful kind of attention to the package in which a billion dollar product is presented to the public. On the CN, though, as on most roads, much of what the public sees of the railroad is, in Mr. Harris's terms, "drab, colorless and out of touch with the times."

In the past, perhaps, the public formed its image of a railroad from frequent daily contact with railroad services, to some extent with its freight service, but primarily with passenger operations. Where service was good and no other considerations overriding, the public tended to think of the railroad with favor; where service was bad, the railroad suffered correspondingly in the public mind.

Reasons for the Decline

To a large extent, public impressions of railroads are still derived from passenger service—an area which technological changes outside the industry have made much less important to the public and one which does not well reflect the tremendous post-war advances in railway modernization. Even on a road like Canadian National, where passenger revenues are important and passenger service is aggressively promoted, the public image derived from passenger service is formed on the basis of something other than the most modern phase of company operations.

Public speeches by the company's senior officers, the annual report, publicity releases to newspapers and trade publications, advertising and sales promotion and the like, of course, emphasize the kind of progressive railroading CN would like the public to have

Improve Its Image

in mind in thinking of the company. Why then, it might be asked, does the public look upon CN along with other railroads as "old fashioned and backward about trying to find new and better ways of doing things?"

The answer, Mr. Harris says, is that the public believes what it sees. And, he quickly adds, it does not see very much of the modernization that has been taking place.

A good corporate image isn't just a luxury, Mr. Harris notes. It can increase sales, improve employee and public relations and—through good design—save money. Ideas influence business, and a poor image has a depressing effect on revenues. Projects to build a better public image are common enough in most industries. They are launched because they have a demonstrable value in improving the receptivity of the public to a company's sales efforts; because they help, by improving employees' pride in the company, create a better product or service; because they improve public relations; and, not least, because they improve profitability.

Faced with the fact of an undesirable public attitude toward their company, Canadian National's management determined to do something about it.

Most perceptions we have of the world around us are received through only one of the five senses: the eyes, CN says. Once the decision was made to attempt to improve the impression Canadian National was making on the public, the direction the project would take was determined. To take advantage of the impressions affected by appearances, CN set up a coordinated program of visual redesign.

James Valkus and Associates, an industrial design firm, was selected as design consultants to work under the direction of the Public Relations department and in consultation with a committee representing other interested departments. Allan Fleming of Toronto, a top graphics designer, was assigned the biggest task in the first phase of the program—development of a new symbol for Canadian National to replace the traditional maple leaf and square.

The visual redesign program was set up to extend to every area of CN operations. Its main task was to tell the people that Canadian National is as modern a method as can be found for moving men, materials and messages promptly and efficiently from place to place—and to leave this concept of the modern Canadian National in the public mind.

As Mr. Harris points out, you can't change the way people think about a company simply by telling people the opposite of what they believe, even though what you tell them is true and what they believe is false. But, people will believe what they see. If they see a modern CN in their day-to-day contact with the railroad, they will be receptive to the facts about modernization that they don't see.

The new symbol developed by Mr. Fleming is being introduced gradually, starting with such things as the new year's annual changes in calendars and forms. It's going on express and transport vehicles as they come in for repainting; it's prominently displayed on the sides of a new order of insulated box cars coming off Canadian Car's production lines; it's in the new offices opening this month in Toronto for downtown passenger sales. Eventually, it will appear everywhere, on over 100,000 revenue freight cars, communication facilities, transport and express vehicles, passenger trains and facilities, office forms, advertising layouts and all the rest of the property and business of the giant transportation system.

Designing the New Symbol

In putting the program into effect, the first question to be answered was what kind of trademark, because that symbol is the one in constant contact with the public. Before choosing a new design, CN officers had to clarify exactly what kind of image they wanted to convey. In the process, they asked these questions and came up with these answers:

- What is the chief characteristic of the company?—Movement of men, materials and messages from one point to another in a fast and efficient manner.
- What should CN stand for?—Efficient and friendly service.
- What particular quality should the symbol have?—It should overcome the notion that Canadian National is obsolescent, if not obsolete.

Summing up, Mr. Harris says: "Our biggest single need is to overcome the notion that we haven't kept pace with the times. Putting this more positively, we should strive primarily to create an image of smart, modern efficiency. The designers were asked, then, to create a symbol that would be expressive of the system as a whole, that would emphasize that Canadian National, in addition to being a railway, is many more things as well. A sym-

bol that would readily lend itself to the needs of all the company's major divisions." For this reason, it was decided to use CN rather than CNR. Natural forms—like the present maple leaf—were discarded as being incompatible with mechanization, which CN wished to stress as an important element in its modernization. Also, stylized natural forms get out of date as styles change. CN's maple leaf symbol has been changed five times to keep up with changing tastes in design.

The company's final choice is a simple pattern that looks like nothing but itself, that lends itself to simple designs and bright colors, that suggests mechanization and automation applied to transportation, and that should not go out of date as styles change. It will be used in simple colors: blue, yellow, red (with strong orange elements), two grays, black and white. It is legible, memorable and easy to reproduce. It lends itself to reproduction in any form and any material (it can be cast, cut, sewed or engraved as well as stencilled), and stencils for it can be cut without using a single supporting strut.

New Design Provides Integrating Link

ROAD FREIGHT POWER will get the new design in black and white with orange-red and white trim, as on this model.

MOTOR VEHICLES, both freight and express (now different colors) will be red-orange with white markings.

"We're hoping to arrive at an integrating link between all our operations," says a CN officer. "We're striving for a unified whole, which we've never had before."

Eventually, the visual redesign program will bring a new look to all of CN's operations. CN paints its revenue-service cars on a 10-12 year maintenance cycle. As cars are shopped, they will get the new trademark and paint scheme at the rate of 7,000 a year.

CN has thousands of printed forms, letterheads, timetables and so forth. First of these to reflect the new design will be those directed to the public, like company letterheads and telegraph blanks. For internal forms, present stocks will be used first, then replaced, although most forms turn over quickly.

The face-lifting will reach passenger equipment sometime this year and will continue till all rolling stock has been brought up to date. Stations will be repainted as schedules permit. Some commuter stations have already been repainted in neutral shades, with bright, eye-catching trim.

Not all applications to all departments have been worked out, simply because of the magnitude of the job. The design staff will continue, though, until the program is completed. Designers work closely with appropriate railway departments, particularly in purchasing and architectural or engineering details. If a design is not feasible for engineering or other reasons, the designers and engineers work together to find one that is. First box car design, for example, with the CN symbol on the left, ran counter to AAR practice. Cars with this pattern will stay on-line; interchange cars will reverse the elements.

The timetable for completing elements of the program is worked out to keep costs at a minimum. The replacement of forms and repainting of property would be necessary sooner or later anyway. It costs no more for good design than for poor design, CN says, and in fact good design is often cheaper because it is simpler.

New York Maps New Rail Aid

Governor Nelson Rockefeller of New York will ask the New York Legislature to provide new relief for the state's railroads. The governor's proposals will be spelled out in his annual message to the 1961 legislature, when it convenes this week.

The program contains four major points. The legislature will be asked to speed up the tax reduction program passed in 1959, to provide new tax relief on facilities used exclusively in passenger service and to revise—perhaps repeal—the state's so-called full-crew law. The fourth point: the railroads will be asked in exchange to agree to continue and improve commuter services.

Governor Rockefeller's new program is based on the same premise as the commuter aid program he requested of the 1959 legislature (RA, Mar. 23, 1959, p. 9). That was that continuation and improvement of the transportation facilities are "vital to the continued growth and prosperity" of New York State.

Under the commuter relief provisions passed by the 1959 legislature, railroads got a gradual change in tax procedures that is expected by the end of five years to amount to a reduction in railroad taxes of as much as $15 million annually. Under the plan, the state reimburses local communities for 50% of the tax abatements. Also passed in 1959 was a commuter car program designed to make it possible for railroads in New York State to acquire modern commuter equipment. A third phase of the 1959 program established the Office of Transportation as a state agency to take responsibility for developing an overall transportation policy.

Governor Rockefeller's new program will attempt to accelerate the 1959 tax relief program to make the full benefits available by late 1961 or early 1962. The new program will also seek a formula to reduce local taxes on terminals, tracks, etc., used entirely in passenger service. Tax losses to local communities would be shared by the state, as is now done under the 1959 tax relief measures.

Governor Rockefeller's message to the legislature will point out that the burden of preserving commuter service should be borne by all elements affected—railway labor and management as well as taxpayers and commuters.

To this end, he will propose a revision of New York's "full-crew" laws, which specify a larger train crew for certain operations in New York State than is required in most neighboring states. (The New York Public Service Commission last year recommended the outright repeal of the "full-crew" laws.)

The governor's message will also ask for cooperative action with other states in seeking a solution to rail commuter problems.

Meanwhile, during the pre-Christmas holidays, it was announced that the New York Central had become the first railroad to reach agreement on terms for purchasing new commuter cars under Governor Rockefeller's 1959 commuter car program. NYC will get 50 new cars under contracts to be let early this year. The railroad will put up $4,100,000 toward the cost of the cars; the remainder of approximately the same amount, will come from the $20,000,000 in state funds appropriated for the program.

Although both the Long Island and the New Haven are also eligible to lease cars under the program, it is understood that neither has yet concluded satisfactory arrangements for financing cars.

LANDIS URGES REORGANIZATION (*Continued from page 9*)

the former, for which "a minimum of legislation is required," are these:

- The achievement of a program for the amelioration of interurban public transportation, including the establishment of metropolitan transit commissions with federal aid in the form of matching guaranteed loans for the acquisition and improvement of facilities and equipment.
- Formulation of policies to coordinate federal highway aid programs with approved metropolitan transit plans, so as to promote the economic soundness and efficiency of metropolitan public transportation systems as a whole, with emphasis on the avoidance of traffic congestion and the decline of public transportation.
- Rationalization of government transport needs, including military transportation, so as not to compete with commercial systems.
- Evolution of federal, state and local tax policies to assure that tax relief to railroads is compensated for in improved service.
- Formulation of policies, through the establishment of joint service boards, to encourage through-routing and joint service among and between all forms of freight transportation, with simplification of billing and freight charges.
- Formulation of policies relating to approval of consolidations and unifications of carriers, both within and between different modes of transportation, which give greater weight to reduction of transportation costs and improvement of service.
- Formulation of policies with respect to the approval of abandonment of railroad routes or services, and the curtailment of service, to assure that the needs of the affected traffic are adequately served by other transportation.
- Establishment of a coordinated statistical gathering, processing, and analytical service to provide reliable domestic transportation data for policy formulation and rate regulation.
- Review and revision of the policies of the Army Corps of Engineers with respect to river and harbor maintenance and improvement to discourage uneconomic expansion.

As to the longer-range objectives, the report says they "may call for revision of policies hitherto established by Congress and fundamental legislative changes." They include the following:

- Revision of the Interstate Commerce Act's Section 4 to modify or abolish the authority of the ICC to grant railroads relief against water-carrier competition.
- Steps to establish cost of service as the principal factor for determining the reasonableness of transportation rates.
- Formulation of a policy for regulating the entry of private carriers into the field of domestic surface transportation, and revision of the present statutory exemptions.
- Formulation of a program of financial aid to distressed railroads to take the place of Chapter 19 of the Interstate Commerce Act with revision to ensure that the borrower will have a sound capital structure and that improvements in equipment and service will result from the financial aid.
- A reconsideration of the field of user charges for federal facilities, particularly as regards air carriers, trucks and inland waterways.

Eliminate locomotive sparking, reduce fire hazards

Replace conventional manifolds now with Electro-Motive's new Spark Arrester

New EMD manifold with *tornado action*

Exhaust gases are directed upward around *one side* of the exhaust manifold chamber (see diagram). This sets up a whirling action which carries large carbonaceous particles around the outer perimeter of the chamber.

Centrifugal force keeps particles suspended inside chamber until they are broken up and cooled. Small, cool particles are then exhausted harmlessly.

Self-cleaning—The turbulent action of the gases within the manifold chamber provides a continuous self-cleaning action, improved performance.

Flange warpage eliminated—Newly designed mounting flanges are 20% thicker to prevent warpage and eliminate exhaust leaks.

Improved gasket sealing surfaces—New techniques in manufacturing and machining the flanges on the Spark Arrester Exhaust Manifold mean better seals, longer gasket life.

New metals reduce weld fatigue—New metals in the Spark Arrester Exhaust Manifold result in stronger welds, longer maintenance-free manifold life, greater reliability.

Sustains higher operating temperatures—New metals and stronger construction means the Spark Arrester Exhaust Manifold can sustain indefinitely the higher operating temperatures of the new, more powerful diesel engines. Ad No. 61-R-5

New Electro-Motive Spark Arrester Manifolds are now available for old and new locomotives. For complete information, contact your nearby Electro-Motive Representative.

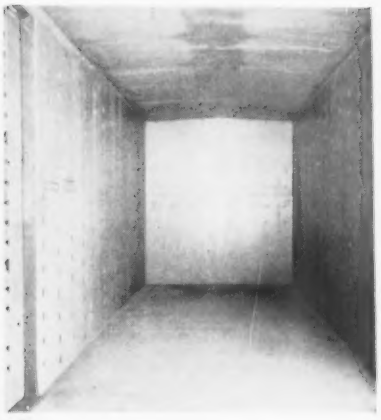
GENERAL MOTORS LOCOMOTIVES

ELECTRO-MOTIVE DIVISION · GENERAL MOTORS

LA GRANGE, ILLINOIS • *HOME OF THE DIESEL LOCOMOTIVE*

In Canada: General Motors Diesel, Limited, London, Ontario

PRIDE IN PRODUCTS



SMOOTH INTERIOR provides maximum shipping space. Sides, roof, ends and floor are Cor-Ten or equivalent. Raised sections of side posts form 616 lading anchors.

RETAINER VALVE 4 ft 6 in. above rail on car side and hand brake above car sill can be reached from ground level.

Southern Cars Protect Lading

► **The Story at a Glance: Lading protection is built into 200 box cars just delivered to the Southern for general merchandise service.**

Long-travel cushioning is the principle by which the Pullman-Standard Hydroframe-60 cars protect the lading from damage-causing impacts.

The Southern has received the first large order of Pullman-Standard Hydroframe-60 cushion underframe cars.

Called Southern Super Cushion Service cars, the 200 steel, single-sheathed 70-ton box cars were built at the P-S Bessemer, Ala., plant. They are being assigned to general merchandise service.

Although structural features of all cushion underframe cars are the same, 100 of the Southern units have P-S hydraulic cushion cylinders, the other 100 have Bendix hydraulic cylinders.

An unsual superstructure feature of the 200 cars is the location of all side posts and carliners on the outside. The cars also have Alcoa aluminum doors, Southern-designed sandwich ends, P-S nailable steel floors and Timken 6 by 11 roller bearings.

The sliding center sill, built up of two welded AAR 41.2-lb Z-sections, extends through the stationary sill and allows for 30 in. cushion travel at each end of the car. The sliding sill has two slots in its webs at the center, allowing the sill to slide in either direction with the cushion keys passing through it.

When the sliding sill is at center position, the cushion cylinder is extended, ready for impact in either direction. The cushion keys at each end of the cushion pocket bear against the cushion key back stops, which, in turn, are welded to the stationary sill. The sliding-sill cushion lugs above and below the cushion key are welded to the inner side of the sliding sill at each end of the cushion pocket. During impact, these lugs move with the sill, compressing the cushion against the opposite key.

The hydraulic cushion generates pres-

Partial List of Equipment on Southern Cars

Air brake equipment	Westinghouse Air Brake
Truck side frames and bolsters	American Steel Foundries Scullin Steel
Axles	Tennessee Coal & Iron
Roller bearings	Timken Roller Bearing Co.
Brake shoes	Walker Mach. & Foundry
Draft gears	W.H. Miner Inc.
Couplers and yokes	American Steel Foundries
Side bearings	A. Stucki Co.
Hand brake	W.H. Miner Inc.
Running boards & brake steps (aluminum)	Morton Mfg. Co.
Brake beams	Creco
Slack adjusters	Westinghouse Air Brake
Doors (aluminum)	Youngstown Steel Door Co.
Truck brake levers, bottom connections, brake rod jaws	Schaefer Equipment Co.
Defect card holder (aluminum)	Railway Devices
Neoprene-gray	Gates Engineering Co.

sure by forcing oil through a controlling orifice. As the piston passes through the cylinder, the orifice is gradually closed as the metering pin fills more of the opening. The closure of the orifice is matched with the slowing-down of the piston to maintain the desired pressure. The orifice is completely closed at the last ½ in. of the stroke, so the cushion never bottoms steel-against-steel.

There is little difference between the Bendix and P-S cylinders. In both, the metering pin is designed to provide the most efficient compromise between light and heavy loads, and slow and fast impact speeds.

P-S uses a pre-loaded return spring to force the cushion and sliding sill back to center or neutral position. Bendix depends on a column of compressed air ahead of a floating piston.

The cushions are self-contained units with no oil pipes and hoses connected to them. Their energy capacity is rated in excess of 500,000 ft lb and their ultimate capacity approaches 1,000,000 ft lb.

The side posts are pressed hot sections. The raised portion of each of these hat sections cover 1½- by- 3-in. slots on 8-in. vertical centers which form the lading strap anchors. There are 616 such anchors per car. A ⅝-in. round bar behind the side sheet on the center line of each side post reinforces the centers of the series of strap anchors.

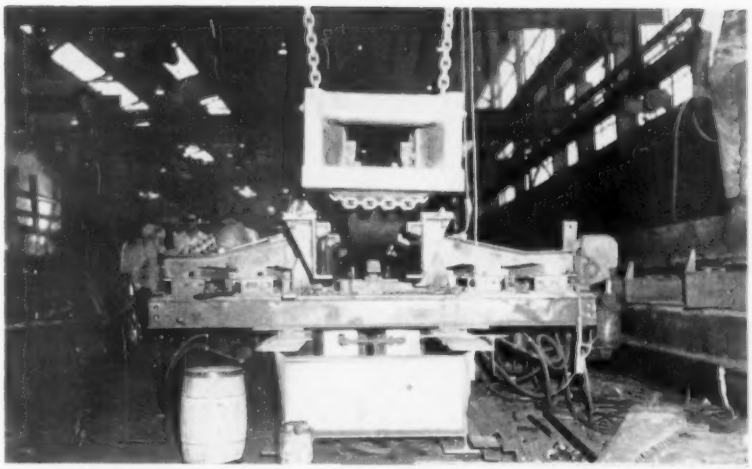
Welded Sandwich Design

The ends are a welded sandwich design, each consisting of 3/16-in. plate with 4-in. corrugations between an inner lining of 3/16-in. plate and an outer sheathing which is 3/16-in. plate at bottom and ⅛-in. at top.

Interior sides and ends of the cars are covered with one light roller coat of primer and six successive roller coats of neoprene rubber paint. The roof interior has one coat of primer, four coats of gray neoprene paint, and a final coat of aluminum neoprene rubber paint. Side, end, and roof outsides have one set of primer and one coat of hot-spray finish paint. The underframe has one coat of chromate primer and one coat of hot-spray freight-car finish paint after the car is assembled. One coat of chromate primer is applied to the axles.

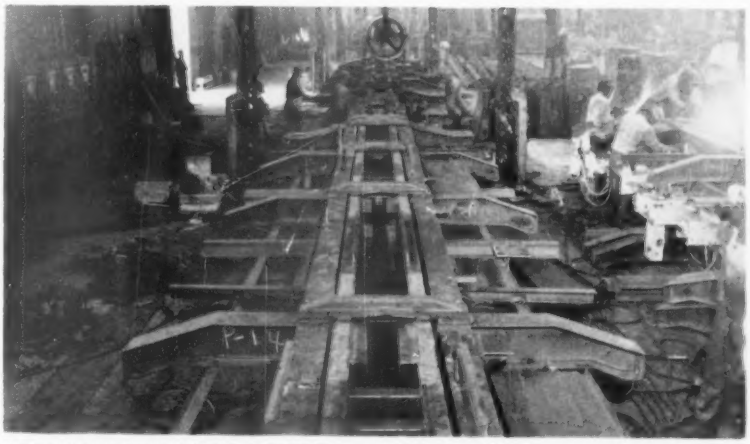
The Barber S-2-C narrow-pedestal trucks are fitted with 3 11/16-in. travel springs, each cluster consisting of seven outer and four inner coils. Stucki side bearings and AAR No. 18 Unit brake beams are used.

The cars have 33-in. AAR D-33 non-heat-treated multiple-wear rolled-steel wheels mounted on 6 by 11 smooth turned axles with raised wheel seats.



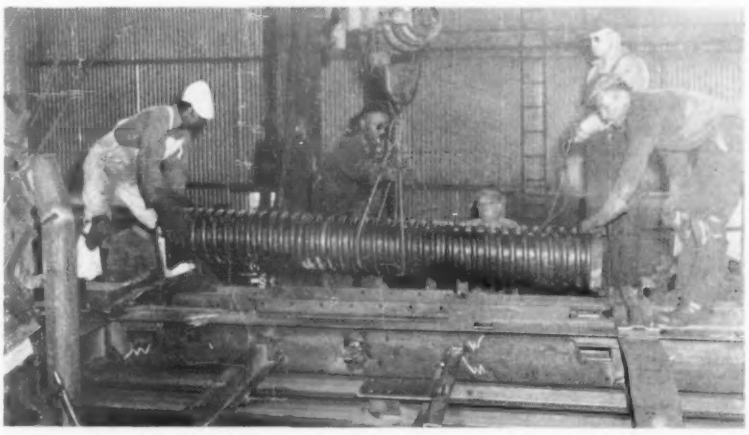
SLIDING SILL is lowered in position. Angle guides control vertical and lateral movement of sill at crossbearers, bolsters and tie foundation.

Sliding sill cushions impacts . . .



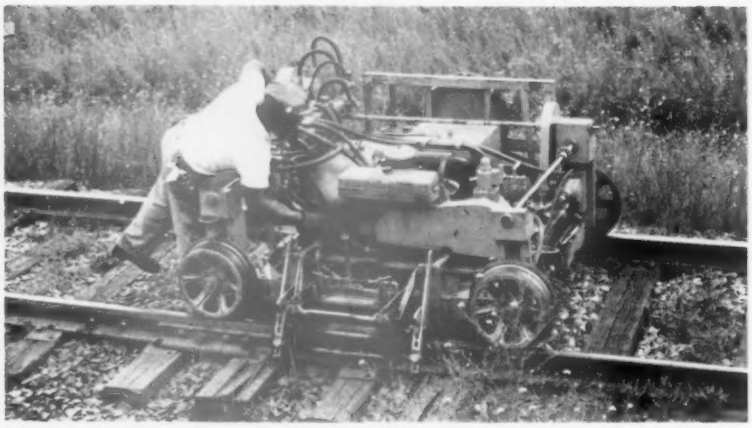
ASSEMBLED UNDERFRAME is inverted for application of accessory brackets. Crossmembers and floor stringers are Cor-Ten or equivalent.

. . . through hydraulic cylinder

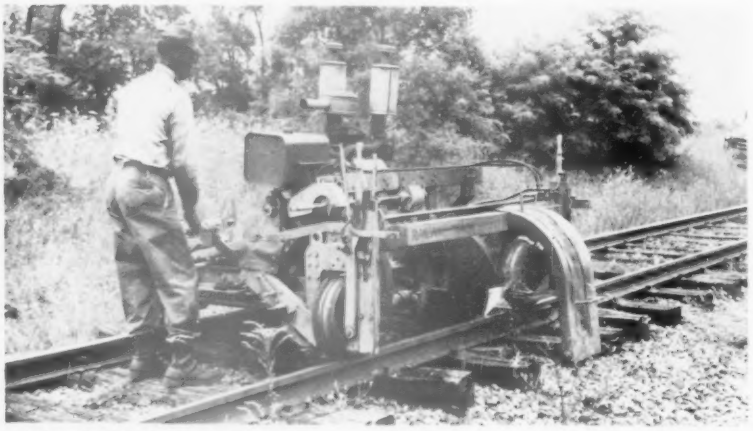


HYDRAULIC CUSHIONING unit with return spring is positioned in sliding sill. Sill supports are bolted to bottom flange of stationary sill.

PRR Saves Money by Using New



MULTIPLE-SPINDLE drill simultaneously bores two or three bolt holes in the existing rail at points determined by the amount of rail to be cropped.



ABRASIVE WHEEL of rail cutter is stopped just short of making a complete severance to prevent the wheel from being pinched by rail expansion.

FLEXIBLE-SHAFT GRINDER is used to chamfer the cut ends, and a blunt-nosed grinder is used to eliminate any incipient cracks at the bolt holes.

► The Story at a Glance: Modern machines help the Pennsylvania improve track conditions at less cost than relaying rail by conventional methods. Cropping rails in the track, says the road, is an economical expedient for bettering track conditions.

The PRR pioneered in-track rail cropping in 1937, tried it again in 1941. The technique was discontinued because the cost made it impractical. Using today's improved equipment, the road has revived the technique.

The Pennsylvania, which introduced the cropping of rails in track, then gave it up for economical reasons, has revived the practice.

The technique, PRR maintenance officers say, saves laying new rail to get usable rail. Also, by using a small, compact gang equipped with modern machines, rail condition is improved more cheaply than by relaying rail in the conventional manner. The road estimates that the cropping-in-track method costs 20 to 25% less.

Cropping rail in track can be used to advantage where certain conditions prevail, the PRR maintenance officers point out. The existing rail must weigh the same as that designated as applicable for the traffic carried. Except for the joint areas, head wear must not be so great as to prevent obtaining approximately 10 years more service life from the rail. Also, tie plates should be in satisfactory condition.

The Pennsy first tried cropping rails in track in 1937. However, the technique required a large number of men then. Also, the single-spindle rail drills then available made the practice slow and uneconomical, so it was discontinued.

In 1941, the Railway Track-work Company developed a new rail saw, utilizing an abrasive wheel, and a gang drill which bored two or three bolt holes simultaneously. Again, the PRR tried cropping rails in track, but the high cost of replacing the abrasive wheels after six or eight cuts, and the large number of men required, forced the road to discontinue the practice.

Last year the road was faced with a need to improve joint conditions on branch lines where rail with built-up ends was chipping and battering. The Pennsy decided again to try cropping the ends in the track in lieu of using new rail to get usable rail. This time the practice proved economical, primarily because of the availability of three improved machines: a gang drill,

Machines to Crop Rail in Track

an abrasive rail cutter and a winch car. Other equipment employed in the procedure includes an RTW flexible-shaft grinder, two Raco bolting machines, a motor car, a push car and a water car. The water car supplies water for the rail drills.

The rail-cropping gang works on one running rail at a time, taking one side on alternate days. The existing rails are 33 ft long, and 18 in. are cropped from each end. For every 10 rails cropped, a filler rail must be inserted to keep the rail-pulling operation within certain limits. The filler rails have been cropped to 30-ft lengths at the road's central cropping plant. These, shipped once a week, are distributed by work train. Those selected have about the same head wear as the rails being cropped in the track. Reformed joint bars are used on the cropped rails and, if available at the time, are distributed with the filler rails.

The PRR rail-cropping gang consists of a foreman, 6 machine operators and 4 trackmen. Each morning, the foreman goes out ahead and marks a point at a predetermined distance from the rail ends. The points are marked with keel on the ball of the rail. Each point is where a gage on the rail drill will be matched for drilling new bolt holes in the rail.

While the foreman is measuring, one man follows behind removing rail anchors and pulling joint spikes by hand from the rails expected to be cropped that day. In addition, he raises any tight spikes on the inside of the rail from the intermediate ties so movement of the rail will not be restrained when it is pulled later on. This man also operates a bolting machine where the cropped rail ends with joints are taken for disassembling.

Next operation is the drilling, which takes about 2½ min. The drilling machine is positioned so a gage mark on the drill carriage coincides with the keel mark on the rail. The machine's rail clamps are set to maintain proper alinement and hole spacing before the drill spindles are started. Water is used to keep the bits cool. When drilling is completed, the foreman uses a plug-type template to check the accuracy of the drilling. The template provides a metal gage for scribing a mark on the ball of the rail where the cut is to be made.

The rail-cutting machine is then moved up and positioned with the abrasive cutting wheel at the scribed mark. This is accomplished by match-

GAP BETWEEN RAIL ENDS is closed by pulling the rail back with a winch mounted on a push car. This operation takes about 6 min.

BOLT HOLES are drilled simultaneously, two each in adjacent rails, by this NCG 6-hole rail drill used on the PRR's Richmond, Ind., branch.

CROPPING THE RAIL ENDS is effected by an abrasive cutting wheel on the NCG Hi-Speed Rail Cutter. The wheel oscillates while cutting.

ing the edge of a hinged gage on the machine with the scribed mark, then flipping the gage out of the path of the cutting wheel. This unit is worked by an operator and one trackman. The latter wedges up the loose rail ends to preclude pinching the cutting wheel. The trackman also sets the rail clamps of the machine, and raises and lowers the cutting wheel between the working and travel positions. The operator feeds the cutting wheel into the rail, using the hand wheel at one end of the machine.

Each rail cut is stopped just short of complete severance. This leaves a little steel for holding back any rail expansion which would pinch the cutting wheel, and permits the machine to pass over the rail ends. Each cut is accomplished in 20 to 30 sec. A portable spark-arrester guard is used to contain the flying sparks.

The next operation removes the cut pieces and chamfers the rail ends to remove saw burrs. This is done with a flexible-shaft grinder after the cut pieces, together with the attached joint bars, are pried out with a rail fork. The grinder operator also grinds off the edges of the drilled bolt holes to prevent cracks.

The 3-ft gap made by removing the cut rail ends is closed by an operator and a trackman, using the winch car. Rail clamps are attached to anchor the car and to move the cropped rail. A shoe is placed on the forward end of the rail to be moved so the rail can slide easily over the tie plates. After the cropped rail has been pulled back the required distance, the shoe is removed and a rail-expansion shim is inserted to produce the proper expansion gap between rails. This operation takes about 6 min.

Reformed bars are then applied to the joint and the bolts are tightened by a bolting machine. The work cycle is completed by redriving the spikes and re-applying the rail anchors. Scrap and recovered materials are picked up by a "skirmish" gang.

The rail-cropping gang averages 10 rails cropped and one filler rail inserted every on-track hour. With an average of 5 hr of on-track time worked per day, the gang completes 1,650 rail-feet. This is the equivalent of 150 rail-feet per man-day, which compares favorably with the 94 rail-feet obtained per man-day in 1941.

During the past season the road had two rail-cropping gangs. One—that described previously in this article—worked on the Cumberland Valley branch of the Philadelphia region. Pennsy's second rail-cropping gang, which worked on the Richmond branch in Indiana, is comprised of 14 men. The gang is equipped with seven machines, several push cars and a truck. In order of working sequence the equipment consists of an NCG multiple-spindle rail drill, a Raco bolting machine, an NCG rail-cutting machine, an RTW flexible-shaft rail grinder, a Burro Model No. 10 crane for towing the push cars, a Raco bolting machine and a US&S flexible-shaft grinder for preparing rail-heads for the application of Thermit signal bonds.

The outstanding differences in this equipment from that used by the gang working on the Cumberland Valley branch, are the rail drill and the rail cutter. These are manufactured by the National Cylinder Gas Division of Chemetron Corporation.

The gang drill used on the Richmond branch can drill six bolt holes simultaneously. Since four-hole reformed joint bars were being used on this job, only four of the machine's spindles were active. These were spaced so as to drill two holes in each of the adjacent rails.

The rail-cutting machine has an abrasive cutting wheel which is almost completely enclosed within a guard shield to protect the operator from flying hot-steel particles. This machine has a mechanism which causes the wheel to oscillate during the cutting operation.

The Burro crane helps to speed up the work. It pulls cut rails back for jointing and tows the push cars, and also swings the filler rails from the push cars to the track and lifts the drilling and rail-cutting machines from the track when clearing for trains. This gang completes the work as it moves along. Its average output is 35 rail lengths per day.

Railroading  After Hours with Jim Lyne

SNOWBIRDS—I hereby offer a personal prize of a 50-cent cigar to the reader who comes up with the best practicable plan for collecting suitable contributions from the "snowbirds."

Snowbirds, of course, are those people who travel or ship by rail only when the highways are snowed in or iced over. They impede the service railroads are able to give to their regular customers—and, because of crowded trains, frequently get away with riding for nothing.

In suburban territory, what would be wrong with a rate of $5 for a one-way ticket to any station in the zone ($10 if paid to conductor) to apply to all passengers not holding multiple-ride tickets; and applicable without previous notice when ever the weather is bad?

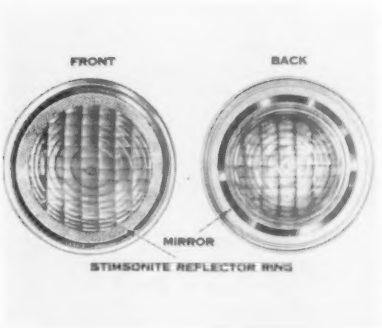
WAGE INFLATION—WHOSE FAULT? I reported here recently what a banker had to say about railroads and other transportation agencies "granting" annual wage increases—and the fix they're in financially as a result. Turner Burgess of the Santa Fe's engineering department at Topeka writes me to suggest that these wage increases are not granted but instead are exacted. He is right, of course. My banker friend was not criticizing the railroads, but merely reporting the results of an economically unhealthy practice.

Any wage increase that leads to a price increase is inflationary (hence, in the long run, has its beneficial effect to the recipient cancelled out by higher prices). These increases are doubly harmful to the railroads because, with them, they entail an increase in roadway expense. Wage increases by highway and waterway operators apply only to costs of operating vehicles—because for these carriers roadway costs are assumed by government.

DOUBLE STANDARD—There's no doubt that increased safety measures are necessary for air transportation—the need being dramatically demonstrated by the recent tragic plane collision over New York. The question is: Who should pay for improved control systems? Perhaps I am hopelessly out-of-date, because I believe this cost should be paid by the airlines—not by the taxpayers. And that the cost should be passed along in increased fares to customers.

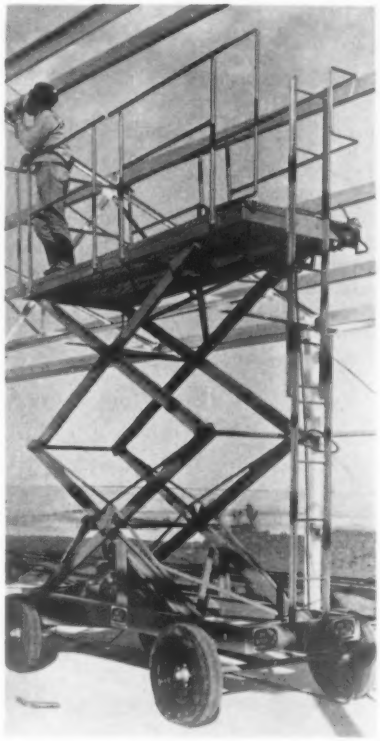
I recall, ten or a dozen years ago, a railroad collision, with quite a number of fatalities, on a line serving Florida. Politicians and demagogic columnists started hollering for train radio and anything else they could think of—all to be provided, of course, at railroad expense.

New Products Report



Plastic Switch Lamp Lens

A new Stimsonite acrylic plastic switch lamp lens is designed to meet all AAR specifications. Two molded sections of the high impact resistance plastic are hermetically sealed, and provide smooth exposed surfaces. A mirrored reflector ring is provided around the edge. Its light distribution allows its use where optical or 30 degree spreadlight lenses are presently used. *Primary Battery Div., Thomas A. Edison Industries, Dept. RA, Bloomfield, N.J.*

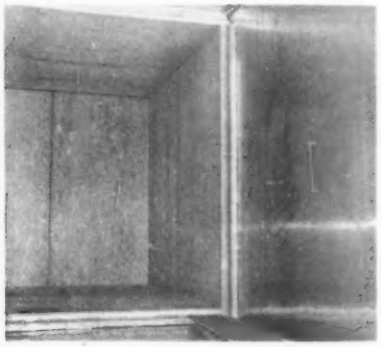


Adjustable Work Platform

The Sky Witch portable hydraulic work load lift can raise material to job height and provide a stable work platform. The model illustrated is powered by a gasoline-engine-driven hydraulic system and is capable of raising 1,000 lb to a height of 17 ft. Other models are available with different height and weight capacities, and with casters or skids as well as the pneumatic tires shown. *Charles Machine Works, Dept. RA, 1959 West Fir Ave., Perry, Okla.*

Electric Flashing Marker Lamp

This electric flashing marker lamp (Bulletin 1160-RR), designed for heavy duty railroad use, utilizes a temperature-compensated transistorized flasher to maintain a constant flashing rate. It is available with a photo-cell to turn the light on at dusk or in tunnels, thus yielding 2,000 hours from two lantern batteries. Several lens colors and diameters are available. *Star Headlight & Lantern Co., Electronics Division Dept. RA, Honeoye Falls, N.Y.*



Insulation Panels

Urefoam insulation panels, with water-proofed plywood faces and aluminum foil backs, are said to provide nearly 100% thermal efficiency in insulation of refrigerated trucks and cars. Standard panels are 4 by 7 and 4 by 8 ft; thicknesses, 3½ and 5¾ in. When properly installed, panels conform with AFDOUS code which recommends zero or below as applied to frozen food transportation equipment. *Urefoam Corp., Dept. RA, Camden, N.J.*

Low-Temperature Insulation

Cellofoam low-temperature insulation is a closed-cell, rigid, expanded polystyrene product having a density of 1.0-2.0 lb per cu ft. It is available in regular and self-extinguishing forms. Maximum length is 12 ft 4 in.; widths, 12, 16 and 24 in., and thicknesses, ½ through 8 in. It may be applied to wood and steel surfaces subject to temperatures as low as minus 60 deg F. *United States Mineral Wool Co., Dept. RA, Stanhope, N.J.*

Desk Top, High Power Radio

A new Consolette table top radio base station is only 15 in. by 18 in. by 9 in. and weighs 40 lb. It can also be utilized with the personal radio paging system. The station provides 25-watt output on 144-174 mc and 30-watt on 25-54 mc. Also new is a 300-watt transmitter for the 25-54 mc band. Standard squelch and "Private Line" dual squelch models are available in both systems. *Motorola Inc., Dept. RA, 4501 W. Augusta Blvd., Chicago 51.*

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1960

Name of Road		Average mileage operated during period	Operating Revenues — Freight	Operating Revenues — Pass.	Operating Revenues — Total (inc. misc.) 1960	Operating Revenues — Total (inc. misc.) 1959	Operating Expenses — Maint. Way and Structures — Total 1960	Maint. Way and Structures — Total 1959	Maint. Way and Structures — Deprec. and Retirements	Operating Expenses — Maint. Equipment — Total 1960	Maint. Equipment — Total 1959	Maint. Equipment — Deprec. and Retirements	Traffic	Transportation	Total 1960	Total 1959	Operating ratio — 1960	Operating ratio — 1959	Net from railway operation	Railway tax accruals	Net Railway operating income 1960	Net Railway operating income 1959
Akron, Canton & Youngstown	Oct.	171	493		506	457	47	49	4	83	80	16	43	164	366	366	76.0	80.1	121	67	35	18
	10 mos.	171	4,949		4,988	4,967	560	588	55	779	754	156	458	1,581	3,847	3,763	77.2	75.8	1,138	688	343	337
Alabama, Tennessee & Northern	Oct.	214	260		262	266	55	50	6	15	15	6	5	76	154	150	58.9	56.5	108	23	32	17
	10 mos.	214	2,288		2,322	2,851	546	498	65	127	112	56	45	845	1,599	1,526	68.9	53.5	723	100	91	233
Atchison, Topeka & Santa Fe	Oct.	12,969	44,341	2,540	52,316	51,768	6,841	6,785	813	9,777	10,113	2,590	1,410	19,361	39,664	39,810	75.8	76.9	12,652	7,930	4,079	4,598
	10 mos.	12,970	430,408	33,667	511,947	527,507	66,864	67,965	7,820	108,006	106,056	24,628	14,184	191,769	402,924	399,137	78.7	75.7	109,023	64,812	35,576	48,221
Atlanta & St. Andrews Bay	Oct.	81	295		301	356	39	41	3	27	31	8	9	78	167	176	55.5	49.3	134	59	36	58
	10 mos.	81	2,949		3,003	3,510	325	398	35	289	310	79	74	746	1,663	1,753	55.4	52.9	1,340	587	371	498
Atlanta & West Point	Oct.	93	239	16	307	326	35	55	8	50	53	14	18	133	259	286	84.4	87.7	48	16	—6	—9
	10 mos.	93	2,358	226	3,076	3,170	396	423	78	498	525	142	182	1,307	2,606	2,679	84.7	84.5	470	176	19	75
Western of Alabama	Oct.	133	260	15	320	350	41	44	10	53	61	19	22	138	277	283	86.6	80.8	43	32	6	21
	10 mos.	133	2,670	209	3,270	3,501	446	508	97	579	593	190	215	1,379	2,847	2,889	87.1	82.5	423	341	55	188
Atlantic Coast Line	Oct.	5,572	11,013	815	12,852	12,904	1,596	1,764	158	2,468	2,491	719	517	5,146	10,532	10,853	82.0	83.9	2,319	1,225	732	684
	10 mos.	5,573	113,208	12,656	135,932	134,563	17,737	19,420	1,752	25,002	24,558	6,911	5,096	53,842	109,502	109,687	80.6	81.5	26,430	13,225	7,603	8,607
Baltimore & Ohio	Oct.	5,909	29,774	1,025	33,655	31,393	3,283	3,785	534	5,678	5,913	1,080	913	14,127	25,874	26,382	76.9	84.0	7,782	2,303	2,786	1,308
	10 mos.	5,909	290,897	13,526	331,485	327,616	35,430	36,148	5,096	63,194	59,669	10,752	9,442	144,809	272,098	265,563	82.1	81.1	59,387	24,610	12,272	22,588
Staten Island Rapid Transit	Oct.	29	130	92	229	307	58	70	12	43	41	1	2	149	285	301	124.1	98.3	—55	55	—129	—70
	10 mos.	29	1,619	906	2,601	2,797	603	551	126	459	394	13	22	1,532	2,936	2,870	112.9	102.2	—335	508	—1,037	—788
Bangor & Aroostook	Oct.	596	827	19	898	788	175	186	22	272	255	109	33	286	826	844	91.9	107.1	72	100	7	56
	10 mos.	597	10,764	197	11,436	10,995	2,740	2,640	218	2,748	2,785	1,094	341	3,474	10,101	10,037	88.3	91.3	1,335	1,013	1,524	1,407
Bessemer & Lake Erie	Oct.	203	2,037		2,115	537	240	323	26	727	607	141	32	458	1,643	1,401	77.7	261.4	472	523	304	276
	10 mos.	203	20,189		20,987	15,901	2,653	2,581	254	6,388	6,356	968	369	4,762	15,992	15,084	76.2	94.9	4,995	5,332	3,376	1,716
Boston & Maine	Oct.	1,557	4,818	436	5,682	5,924	585	673	162	771	788	241	144	2,430	4,231	4,432	74.5	74.8	1,451	470	394	401
	10 mos.	1,557	47,883	4,941	57,263	60,755	6,401	7,719	1,505	8,447	8,625	2,421	1,596	24,581	44,500	48,749	77.7	80.2	12,763	4,688	2,583	1,776
C P R Lines in Maine	Oct.	234	319	37	387	502	99	107	20	66	84	18	19	127	343	419	88.8	83.5	44	32	—58	
	10 mos.	234	5,812	454	6,545	6,707	957	1,294	202	864	1,065	175	201	1,756	4,069	4,612	62.2	68.8	2,476	334	1,351	1,000
Carolina & Northwestern	Oct.	284	282		289	376	31	52	8	31	31	21	6	72	154	187	53.4	49.8	135	Cr.7	88	105
	10 mos.	284	2,602		2,659	2,876	317	466	72	291	311	210	55	770	1,574	1,793	59.2	62.3	1,085	183	459	374
Central of Georgia	Oct.	1,745	3,206	92	3,589	3,860	542	529	50	737	752	202	166	1,480	3,132	3,119	87.3	80.8	457	280	196	421
	10 mos.	1,745	31,486	1,213	34,838	36,965	5,429	5,681	484	7,294	7,097	1,924	1,716	14,471	30,929	31,069	88.8	84.1	3,908	2,798	1,193	3,275
Central of New Jersey	Oct.	593	3,294	484	4,286	4,468	453	474	96	434	666	—102	67	2,102	3,257	3,522	76.0	78.8	1,029	497	154	315
	10 mos.	594	34,324	4,757	43,077	43,905	4,750	4,946	966	6,435	7,716	898	737	21,141	35,380	37,128	82.1	84.6	7,697	5,031	—919	384
Central Vermont	Oct.	375	718	57	853	1,146	146	211	18	108	96	9	18	362	787	1,095	92.3	84.2	66	57	—99	—32
	10 mos.	375	6,921	516	8,105	8,764	1,886	2,242	188	1,120	1,081	93	187	3,454	7,155	7,432	88.3	84.8	950	565	719	437
Chesapeake & Ohio	Oct.	5,122	28,828	455	30,931	28,941	3,800	3,500	560	5,240	4,641	1,879	849	11,106	22,804	21,114	73.7	73.0	8,127	3,320	5,046	4,916
	10 mos.	5,122	271,878	5,067	292,546	290,010	34,300	32,730	4,826	52,735	50,619	18,996	8,397	107,903	219,913	214,666	75.2	74.0	72,634	33,541	42,389	45,935
Chicago & Eastern Illinois	Oct.	862	2,626	135	3,027	3,250	407	335	32	480	596	150	139	1,252	2,456	2,398	81.1	73.8	571	246	108	400
	10 mos.	862	24,494	1,758	28,960	30,611	3,704	3,571	313	5,336	5,104	1,751	1,396	12,033	24,267	23,779	83.7	77.7	4,713	2,363	421	2,287
Chicago & Illinois Midland	Oct.	121	598		614	684	60	32	13	118	105	23	30	162	416	363	67.8	53.8	198	114	71	132
	10 mos.	121	6,060		6,200	6,149	488	414	86	1,119	1,004	231	303	1,561	3,951	3,635	63.7	59.1	2,249	1,262	872	1,011
Chicago & North Western	Oct.	9,277	16,510	1,450	19,070	17,423	2,928	2,592	384	2,926	2,914	1,021	577	7,590	15,123	14,683	79.3	84.3	3,947	1,364	1,149	74
	10 mos.	9,279	148,790	14,699	174,668	181,012	27,823	29,258	3,689	30,196	30,725	10,324	5,557	73,459	147,349	154,100	84.4	85.1	27,319	13,646	2,711	3,716
Chicago, Burlington & Quincy	Oct.	8,655	18,783	1,534	23,046	22,640	3,199	2,885	411	3,616	3,308	1,121	628	8,986	17,437	16,829	75.7	74.3	5,608	3,000	2,166	1,989
	10 mos.	8,661	168,509	18,103	208,548	219,035	28,514	30,663	4,046	39,037	41,712	10,991	6,319	85,568	170,094	176,547	81.6	80.6	38,454	20,781	13,652	15,656
Chicago Great Western	Oct.	1,469	2,718	7	2,950	3,002	452	443	50	463	419	131	123	1,085	2,221	2,080	75.3	69.3	729	239	171	273
	10 mos.	1,469	25,561	86	27,617	28,724	3,687	4,208	464	4,360	4,238	1,289	1,225	9,908	20,081	20,188	72.7	70.3	7,537	2,772	1,991	3,090
Chic., Milw., St. P. & Pacific	Oct.	10,596	17,378	1,093	20,926	20,525	2,399	2,604	448	2,953	2,914	1,021	577	7,590	15,123	14,683	79.3	84.3	3,947	1,364	1,149	74
	10 mos.	10,598	160,184	12,749	194,151	204,513	28,972	32,349	4,321	32,901	35,404	8,839	5,868	78,431	158,246	167,592	81.5	81.9	35,906	17,043	8,367	11,979
Chicago, Rock Island & Pacific	Oct.	7,541	13,733	1,152	16,846	17,045	2,194	2,380	315	3,041	3,093	679	548	7,229	13,944	14,000	82.8	82.1	2,902	1,197	308	677
	10 mos.	7,533	148,826	13,783	179,737	185,950	24,131	24,540	2,651	30,485	32,158	6,625	5,509	73,543	143,404	145,530	79.8	78.3	36,333	15,536	6,944	9,470
Clinchfield	Oct.	293	1,679		1,687	1,700	189	229	22	285	323	107	74	437	1,056	1,121	62.6	65.9	630	196	573	521
	10 mos.	293	16,520	1	16,610	17,531	1,911	2,192	223	3,275	3,216	1,060	675	4,345	10,902	11,109	65.6	63.4	5,709	2,894	5,056	5,843
Colorado & Southern	Oct.	712	1,069	61	1,286	1,171	216	183	20	254	191	81	33	590	1,170	1,043	91.0	89.1	116	79	24	63
	10 mos.	712	10,623	818	13,021	13,178	1,924	2,491	220	2,161	2,384	795	348	5,557	10,732	11,440	82.4	86.8	2,289	1,372	789	475
Ft. Worth & Denver	Oct.	1,362	1,807	120	2,148	2,429	424	238	35	285	258	46	70	949	1,854	1,616	86.3	66.5	294	21	—59	194
	10 mos.	1,362	16,874	1,525	20,605	21,841	2,985	3,514	327	2,615	2,919	461	714	8,549	16,163	17,146	78.4	78.5	4,442	1,354	622	767
Colorado & Wyoming	Oct.	39	109		211	238	14	13	2	37	24	12	3	96	168	70	79.3	250.0	44	33	8	—37
	10 mos.	39	1,669		3,085	2,709	209	176	23	301	324	125	22	1,213	1,925	1,607	62.4	59.3	1,160	728	384	378
Delaware & Hudson	Oct.	763	3,473	119	3,676	3,847	412	421	61	648	782	199	101	1,300	2,729	2,898	74.2	75.3	947	158	838	570
	10 mos.	763	33,966	1,296	36,584	38,362	4,343	4,232	630	7,779	6,977	1,987	1,070	13,823	29,690	29,357	81.2	76.5	6,894	3,597	3,899	5,182
Denver & Rio Grande Western	Oct.	2,128	6,018	207	6,436	6,123	602	658	96	951	958	331	234	2,098	4,180	4,149	65.0	67.8	2,256	1,344	931	859
	10 mos.	2,128	59,118	2,580	63,790	62,570	7,070	7,375	970	9,697	9,436	3,275	2,368	20,633	42,897	42,612	67.2	68.1	20,893	12,002	8,688	8,992
Detroit & Toledo Shore Line	Oct.	50	543		593	590	48	56	5	68	74	24	20	210	366	393	61.6	66.6	227	93	58	45
	10 mos.	50	5,352		5,795	6,493	554	610	39	725	820	241	202	2,228	3,883	4,127	67.0	69.6	1,912	686	313	495
Detroit, Toledo & Ironton	Oct.	465	1,595		1,722	1,513	198	237	28	405	343	149	56	512	1,266	1,218	73.5	80.5	456	123	325	196
	10 mos.	465	16,227		17,186	17,893	2,310	2,501	282	4,246	4,026	1,511	577	5,008	13,104	13,015	76.3	72.7	4,082	1,219	2,845	3,420
Duluth, Miss. & Iron Range	Oct.	574	3,935	1	4,666	571	595	382	104	628	497	217	13	1,421	2,961	1,725	63.4	302.1	1,706	1,065	690	—616
	10 mos.	575	38,472	13	45,099	25,862	5,440	4,821	790	6,697	5,688	2,101	136	13,297	28,494	22,694	63.2	87.7	16,606	10,114	6,412	396
Duluth, So. Shore & Atlantic	Oct.	544	454	2	479	546	112	108	14	114	102	26	33	193	474	460	98.8	84.3	6	42	—72	17
	10 mos.	544	5,456	24	5,806	5,885	1,090	1,162	129	1,101	1,113	262	331	2,074	4,838	4,913	83.5	83.5	968	426	380	461
Duluth, Winnipeg & Pacific	Oct.	175	466	2	472	474	87	59	10	53	48	1	7	175	333	307	70.5	64.8	139	45	—2	44
	10 mos.	175	4,624	8	4,667	4,901	1,127	1,146	58	558	593	11	73	1,816	3,679	3,746	78.8	76.4	988	433	—259	—111

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1960

Name of Road		Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (inc. misc.) 1960	Total (inc. misc.) 1959	Operating Expenses: Maint. Way and Structures: Total 1960	Total 1959	Deprec and Retirements	Maint. Equipment: Total 1960	Total 1959	Deprec and Retirements	Traffic	Transportation	Total 1960	Total 1959	Operating ratio 1960	Operating ratio 1959	Net from railway operation	Railway tax accruals	Net Railway operating income 1960	Net Railway operating income 1959
Elgin, Joliet & Eastern	Oct.	205	2,653	....	3,391	1,011	284	195	28	697	373	131	44	1,269	2,660	1,570	78.5	155.4	730	449	166	—288
	10 mos.	205	31,838	....	42,128	36,202	3,514	2,793	286	8,903	6,752	1,253	458	16,348	32,825	27,816	77.9	76.8	9,298	5,380	1,648	1,757
Erie-Lackawanna[5]	Oct.	3,181	15,613	1,246	19,056	18,868	1,677	1,856	383	3,111	3,153	887	518	9,456	15,978	15,732	83.8	83.4	3,078	1,869	144	400
	10 mos.	3,180	154,028	13,231	186,652	188,466	19,783	19,960	3,815	32,186	31,673	8,907	5,582	92,891	162,183	161,983	86.9	85.9	24,469	19,012	5,578	827
Florida East Coast	Oct.	572	1,502	223	1,929	2,409	236	368	47	529	571	115	71	844	1,834	2,168	95.1	90.0	95	186	288	175
	10 mos.	572	18,657	4,039	25,182	27,339	3,156	4,016	433	4,855	5,411	1,162	798	9,992	20,591	22,910	81.8	83.8	4,591	2,051	405	142
Georgia Railroad	Oct.	321	568	13	676	621	79	97	9	111	119	34	40	299	567	597	83.9	96.1	109	40	70	1
	10 mos.	321	5,330	163	6,353	6,689	816	943	85	1,114	1,232	334	399	2,916	5,634	6,001	88.7	90.9	719	411	395	353
Georgia & Florida	Oct.	321	261	....	266	397	53	51	3	45	36	10	24	90	271	216	102.2	81.3	6	21	44	19
	10 mos.	321	2,698	....	2,756	2,863	1,096	729	35	412	404	100	224	880	2,808	2,480	101.9	86.6	52	209	440	43
Grand Trunk Western	Oct.	951	3,898	165	4,461	4,988	616	702	57	974	864	155	92	2,139	4,053	4,046	90.9	99.0	408	399	250	945
	10 mos.	951	37,982	2,145	44,119	48,580	6,906	7,048	628	8,323	9,101	1,151	929	21,631	40,232	43,603	91.2	89.8	3,887	4,014	4,624	5,208
Great Northern	Oct.	8,280	20,601	610	22,463	22,657	3,375	2,866	177	3,388	4,109	917	552	7,699	16,115	15,984	71.7	70.5	6,347	3,135	2,776	3,071
	10 mos.	8,294	186,541	7,741	209,342	213,341	33,865	34,152	3,124	38,581	39,978	8,861	5,678	75,693	163,910	165,318	78.3	77.5	45,433	25,681	15,780	18,403
Green Bay & Western	Oct.	219	383	....	398	397	75	50	6	60	34	8	26	131	314	300	79.9	75.5	79	40	9	19
	10 mos.	219	3,551	....	3,682	3,965	614	669	49	486	458	86	277	1,208	2,829	2,904	76.8	73.2	853	405	90	232
Gulf Mobile & Ohio	Oct.	2,747	6,196	203	6,836	7,029	807	916	80	1,339	1,375	294	269	2,344	5,071	5,102	74.2	72.6	1,765	815	518	631
	10 mos.	2,747	57,279	2,312	64,032	68,305	8,523	9,144	771	13,248	13,586	2,939	2,810	22,862	50,795	52,393	79.3	76.7	13,238	5,864	3,306	4,526
Illinois Central	Oct.	6,500	19,292	1,803	23,652	24,911	2,833	2,995	567	3,898	4,171	885	649	8,912	17,329	17,886	73.3	71.8	6,323	3,068	2,098	2,521
	10 mos.	6,500	175,413	18,722	217,292	225,371	31,502	32,227	3,983	41,354	41,496	8,668	6,494	86,063	176,287	177,537	81.1	78.8	41,005	22,452	10,893	15,655
Illinois Terminal	Oct.	335	775	....	850	866	75	106	3	151	158	27	42	141	660	709	75.0	81.9	220	61	53	8
	10 mos.	335	7,106	....	7,974	8,916	774	1,060	30	1,407	1,843	268	460	3,264	6,458	7,518	81.0	84.3	1,517	410	119	12
Kansas City Southern	Oct.	891	3,070	64	3,484	3,710	221	252	48	424	552	113	106	1,133	2,001	2,157	57.4	58.2	1,483	616	594	641
	10 mos.	891	32,068	737	36,308	37,965	2,641	2,899	487	5,004	5,216	1,131	974	11,811	21,718	222,025	59.8	58.0	14,589	5,976	6,017	6,666
Kansas, Oklahoma & Gulf	Oct.	328	435	....	436	421	45	34	7	34	31	12	33	103	245	217	56.2	51.6	191	86	54	74
	10 mos.	327	4,275	....	4,318	4,549	379	597	76	371	340	123	333	1,009	2,472	2,515	57.2	55.3	1,846	738	669	728
Lake Superior & Ishpeming	Oct.	160	313	....	409	92	46	37	12	71	49	36	2	109	248	151	60.5	163.9	162	107	65	32
	10 mos.	160	3,612	....	4,669	3,113	604	798	120	774	622	355	22	1,160	2,750	2,534	58.9	81.4	1,920	1,192	839	283
Lehigh & Hudson River	Oct.	95	292	....	292	272	27	21	2	32	27	8	16	104	197	190	67.4	69.7	95	37	16	11
	10 mos.	96	2,664	....	2,678	2,775	265	289	24	306	289	83	162	1,057	1,975	2,023	73.8	72.9	703	248	78	90
Lehigh & New England	Oct.	177	246	....	249	548	46	55	11	196	179	37	8	157	453	528	182.3	96.5	205	24	139	107
	10 mos.	177	3,116	....	3,153	5,076	443	630	79	1,850	1,675	378	120	1,612	4,531	5,083	144.7	100.1	1,378	273	836	879
Lehigh Valley	Oct.	1,127	4,155	89	4,446	4,243	534	507	96	721	628	216	130	2,271	3,887	3,721	87.4	87.7	559	356	54	79
	10 mos.	1,127	40,472	1,105	43,475	45,197	5,800	5,332	969	7,599	7,649	1,828	1,349	22,639	39,658	40,683	91.2	90.0	3,817	4,543	2,906	1,616
Long Island	Oct.	344	824	4,742	5,733	5,816	676	809	96	1,048	1,105	169	55	3,043	5,058	5,084	88.2	87.4	675	414	114	71
	10 mos.	344	8,866	41,943	52,794	57,633	7,794	8,091	1,033	10,333	11,049	1,690	456	27,750	48,536	50,808	91.9	88.2	4,258	4,012	1,787	755
Louisiana & Arkansas	Oct.	746	1,732	87	1,864	2,166	152	170	26	252	324	98	87	641	1,202	1,334	64.5	61.6	662	370	192	281
	10 mos.	746	18,763	410	20,520	21,193	1,898	1,932	233	2,997	3,038	928	797	6,738	13,212	13,338	65.0	62.9	7,108	3,644	2,329	2,773
Louisville & Nashville	Oct.	5,684	17,373	497	19,238	19,200	3,106	2,269	320	3,605	3,681	1,201	527	7,592	15,566	14,768	82.0	76.9	3,472	2,685	1,592	1,632
	10 mos.	5,684	167,859	7,058	188,774	189,897	23,906	25,634	3,211	40,245	38,276	11,628	5,114	75,811	154,795	152,743	82.0	80.4	33,979	24,148	13,550	14,835
Maine Central	Oct.	936	1,737	....	1,855	1,906	374	422	30	353	363	81	28	679	1,554	1,687	83.8	88.5	301	131	123	115
	10 mos.	936	18,821	205	20,299	20,536	3,565	3,753	287	3,709	3,750	824	308	7,322	16,028	16,811	79.0	81.9	4,271	1,869	1,618	1,402
Minneapolis & St. Louis	Oct.	1,391	1,805	....	1,855	1,740	343	260	18	170	238	45	102	561	1,260	1,396	67.9	80.1	595	263	228	150
	10 mos.	1,391	16,755	3	17,212	18,207	2,557	2,846	290	2,627	3,102	914	1,167	6,186	13,881	15,056	80.6	82.7	3,330	1,837	886	1,257
Minn., Northfield & Southern	Oct.	77	294	....	317	350	30	29	2	30	47	13	35	74	204	238	64.4	67.8	113	65	39	30
	10 mos.	77	2,966	....	3,149	3,663	268	242	26	392	409	129	351	856	2,238	2,283	71.1	62.3	911	570	289	501
Minn., St. Paul & S. Ste. Marie	Oct.	3,222	3,955	33	4,130	3,456	536	852	71	674	605	141	103	1,338	2,862	3,127	69.3	90.5	1,267	450	539	702
	10 mos.	3,222	32,704	518	34,852	35,969	5,602	7,384	513	6,199	6,791	1,432	1,096	13,728	28,826	31,592	82.7	87.8	6,027	3,000	2,049	1,578
Missouri-Illinois	Oct.	172	510	....	517	553	53	48	3	95	84	40	11	133	311	298	60.1	53.9	206	158	93	164
	10 mos.	172	4,551	....	4,565	4,687	416	448	52	906	877	400	140	1,320	2,914	2,889	63.8	61.6	1,651	1,374	741	993
M-K-T Lines	Oct.	2,892	4,443	77	4,826	4,761	573	433	85	810	1,121	263	173	1,895	3,657	3,634	75.8	76.3	1,169	341	313	272
	10 mos.	2,915	43,966	770	48,587	49,598	5,413	5,324	869	9,501	10,322	2,623	1,750	17,967	36,678	37,107	75.5	74.8	11,989	3,490	3,235	3,384
Missouri Pacific	Oct.	9,406	22,182	827	25,576	25,429	3,270	3,527	323	4,331	4,344	1,164	739	9,829	19,238	19,341	75.2	76.1	6,338	2,186	2,659	2,931
	10 mos.	9,411	216,161	9,558	249,953	254,221	34,142	34,810	3,239	43,490	43,704	10,652	7,255	96,084	191,514	193,160	76.6	76.0	58,438	19,436	26,512	27,327
Monon	Oct.	541	1,514	27	1,627	1,821	242	249	20	290	318	76	97	632	1,359	1,470	83.5	80.7	268	121	48	142
	10 mos.	541	14,300	272	15,492	16,782	2,412	2,435	215	2,791	3,026	761	1,025	6,392	13,637	14,233	88.0	84.8	1,856	1,183	263	921
Monongahela	Oct.	177	301	....	303	514	80	71	11	56	50	11	1	133	282	291	93.1	56.7	21	19	61	142
	10 mos.	177	5,513	....	5,539	4,348	741	678	120	523	547	109	9	1,322	2,770	3,077	50.0	70.8	2,768	401	1,809	563
New York Central	Oct.	10,368	42,481	4,758	56,343	56,494	6,261	5,398	1,138	10,300	11,100	2,450	1,028	26,371	46,931	46,940	83.3	38.1	9,411	5,263	1,673	1,815
	10 mos.	10,368	430,098	55,893	569,465	572,038	62,281	60,478	10,925	111,550	109,000	24,416	10,518	265,803	479,444	480,007	84.2	83.9	90,021	56,631	11,559	18,117
Pittsburgh & Lake Erie	Oct.	220	2,090	30	2,193	958	383	329	55	1,025	756	333	61	941	2,613	1,970	119.1	205.8	420	122	504	176
	10 mos.	220	27,772	334	29,347	25,058	4,109	3,650	555	9,287	8,473	3,326	629	10,776	26,895	24,992	91.6	99.7	2,452	5,088	8,202	6,390
New York, Chicago & St. L.	Oct.	2,170	11,653	89	13,184	11,945	1,344	1,186	161	1,646	1,759	274	360	4,856	8,706	8,184	66.0	68.5	4,479	1,893	1,642	1,709
	10 mos.	2,170	121,373	1,228	127,470	124,149	13,585	13,625	1,577	20,018	20,367	4,510	3,608	48,810	91,014	89,343	71.4	72.0	36,456	16,922	12,873	14,158
New York, New Haven & Hartford	Oct.	1,742	5,866	3,514	10,854	11,867	1,478	1,551	269	1,344	1,573	505	216	5,611	9,968	10,099	91.8	85.1	886	1,049	1,595	579
	10 mos.	1,754	60,047	36,505	111,886	120,618	14,220	14,855	2,637	19,017	17,803	4,733	2,387	56,559	101,037	103,266	90.3	85.6	10,849	10,227	14,131	6,659
New York Connecting	Oct.	21	275	....	301	327	66	109	25	9	11	....	....	76	154	198	51.3	60.5	147	100	1	14
	10 mos.	21	2,394	....	2,698	3,263	710	718	253	162	134	....	....	832	1,741	1,756	64.5	53.8	957	947	265	390
New York, Sus. & Western	Oct.	90	338	5	370	349	45	45	9	52	46	9	10	147	280	309	75.6	88.4	90	29	11	45
	10 mos.	100	3,094	122	3,390	3,342	415	419	69	503	526	103	92	1,519	2,846	3,047	84.0	91.2	544	331	214	426
Norfolk & Western	Oct.	2,743	19,046	202	20,036	20,159	2,194	2,126	408	2,948	2,909	1,471	383	5,085	11,616	11,888	58.0	59.0	8,420	3,533	6,292	6,416
	10 mos.	2,743	194,295	2,071	204,973	205,627	22,440	22,569	4,161	32,912	35,292	14,560	4,074	54,310	121,935	125,573	59.5	61.1	83,038	41,617	55,404	53,475

(Continued on next page)

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands; i.e., with last three digits omitted)

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1960

Name of Road		Average mileage operated during period	Operating Revenues — Freight	Pass.	Total (inc. misc.) 1960	1959	Operating Expenses — Maint. Way and Structures — Total 1960	Total 1959	Deprec. and Retirements	Maint. Equipment — Total 1960	Total 1959	Deprec. and Retirements	Traffic	Transportation	Total 1960	Total 1959	Operating ratio — 1960	1959	Net from railway operation	Railway tax accruals	Net Railway operating income 1960	1959
Norfolk Southern	Oct.	592	845		864	888	177	197	14	145	153	40	50	333	780	742	90.3	83.5	84	56	52	59
	10 mos.	592	7,704		7,856	8,230	1,716	1,895	143	1,336	1,349	401	497	2,676	6,896	7,065	88.0	85.8	940	547	175	310
Northern Pacific	Oct.	6,806	13,439	390	14,939	16,187	1,968	2,322	599	2,552	2,611	837	453	5,880	11,767	12,007	78.8	74.2	3,172	2,157	1,403	1,709
	10 mos.	6,819	132,209	5,089	148,028	155,515	24,026	24,085	3,596	27,866	27,029	8,176	4,248	59,763	125,244	124,112	84.6	79.8	22,814	17,102	8,198	12,491
Northwestern Pacific	Oct.	328	876		884	1,203	249	216	57	68	61	5	5	280	627	651	71.0	54.1	257	46	3	125
	10 mos.	328	9,880	5	9,947	11,903	2,012	2,131	231	760	819	26	74	3,039	6,149	6,702	61.8	56.3	3,798	1,130	359	1,169
Pacific Electric	Oct.	338	961		1,139	1,113	165	168	25	45	46	4	18	525	847	902	74.4	81.1	292	152	29	74
	10 mos.	350	9,964		11,387	11,745	1,790	1,838	234	397	542	37	217	5,342	8,760	9,333	76.9	79.5	2,626	1,425	518	295
Pennsylvania	Oct.	9,873	55,743	7,725	72,719	70,037	6,160	6,375	1,477	12,352	14,215	3,042	1,192	32,732	56,210	56,688	77.3	80.9	16,509	5,727	5,111	2,034
	10 mos.	9,884	544,283	81,993	713,045	736,086	72,638	71,981	14,720	135,856	147,999	29,705	11,931	325,463	587,244	607,655	82.4	82.6	125,801	59,252	6,966	21,606
Penn.-Reading SS Lines	Oct.	338	559	44	628	684	146	158	25	116	130	26	8	453	809	834	128.7	122.0	180	72	419	574
	10 mos.	338	5,302	815	6,342	6,814	1,698	2,171	256	1,200	1,310	257	75	4,782	8,380	8,997	132.1	132.0	2,037	738	3,494	4,499
Piedmont & Northern	Oct.	126	480		491	516	63	44	5	36	40	10	33	93	264	259	53.7	50.1	227	112	69	73
	10 mos.	126	4,633		4,747	4,693	482	431	53	371	348	98	326	937	2,515	2,361	53.0	50.3	2,252	1,082	613	647
Pittsburgh & West Virginia	Oct.	132	529		532	422	164	273	27	144	145	44	65	198	638	738	119.8	174.8	106	Cr.65	42	130
	10 mos.	132	6,686		6,746	6,454	1,498	1,557	260	1,478	1,567	448	705	2,052	6,344	6,574	94.1	101.9	401	27	315	149
Reading	Oct.	1,303	7,454	562	8,690	8,669	1,184	1,071	204	1,737	1,540	471	187	3,743	7,312	6,999	84.1	80.7	1,378	728	529	805
	10 mos.	1,303	78,340	4,901	89,436	88,240	10,968	11,236	1,942	17,194	17,028	4,800	1,924	39,402	74,273	74,483	83.0	84.4	15,164	6,098	5,644	6,272
Richmond, Fred. & Potomac	Oct.	118	1,167	296	1,779	1,933	196	164	29	296	294	67	28	656	1,318	1,277	74.0	66.1	461	35	328	173
	10 mos.	118	12,518	4,133	19,960	19,848	1,697	1,511	297	2,963	2,902	647	280	6,793	13,181	13,236	66.0	66.7	6,779	3,787	2,014	1,965
Rutland	Oct.	391	4		12	391	18	75	8	31	61	18	8	24	96	352	794.2	90.2	—84	15	—95	2
	10 mos.	391	2,792		3,017	3,844	673	770	88	545	591	182	254	1,342	3,075	3,509	101.9	91.3	—58	290	—367	—7
St. Louis-San Francisco	Oct.	4,546	9,327	180	10,361	10,700	1,656	1,534	165	1,620	1,603	613	351	3,893	8,151	8,295	78.5	77.5	2,230	708	1,242	1,179
	10 mos.	4,549	89,384	1,864	99,244	100,552	15,419	15,450	1,807	16,183	17,060	5,999	3,570	39,427	80,737	81,578	81.4	81.1	18,508	7,107	9,108	9,573
St. Louis-S F & Texas	Oct.	143	441		455	425	26	38	4	20	30	1	22	183	263	253	57.8	59.5	192	76	83	42
	10 mos.	143	4,178	2	4,342	4,302	309	279	41	254	277	12	221	1,501	2,418	2,426	55.7	56.4	1,923	578	657	538
St. Louis Southwestern Lines	Oct.	1,554	5,688		5,763	5,826	576	532	86	720	801	226	178	1,941	3,358	3,518	62.3	69.4	2,175	1,077	917	948
	10 mos.	1,554	53,908	1	54,591	55,179	5,766	5,864	837	6,998	6,812	2,174	1,825	17,884	34,532	34,581	62.9	62.7	20,259	9,123	9,142	8,823
Savannah & Atlanta	Oct.	144	345		356	343	61	48	2	63	64	19	15	118	271	260	76.1	75.8	85	40	37	40
	10 mos.	144	3,512		3,657	3,432	578	511	18	678	638	194	165	1,174	2,726	2,599	74.5	73.7	931	396	376	402
Seaboard Air Line	Oct.	4,145	10,708	814	12,582	13,475	1,589	1,853	212	2,572	2,606	766	466	4,865	10,156	10,453	80.7	77.6	2,425	1,136	1,075	1,514
	10 mos.	4,146	109,444	11,854	131,816	133,388	16,979	17,019	2,196	25,586	24,465	7,426	4,739	48,997	103,207	101,231	78.3	75.9	28,610	12,635	13,164	15,955
Southern Railway	Oct.	6,267	19,595	624	22,019	22,699	2,378	2,768	409	3,881	3,758	1,038	527	7,277	15,345	15,436	69.7	68.0	6,674	2,692	3,183	3,335
	10 mos.	6,267	191,129	9,015	216,815	224,913	26,584	28,442	3,527	38,171	37,866	10,178	5,156	77,177	153,177	154,868	70.6	68.9	63,642	27,544	29,126	32,155
Alabama Great Southern	Oct.	328	1,105	35	1,317	1,290	201	210	37	277	286	83	43	515	1,145	1,113	86.9	86.3	173	77	70	69
	10 mos.	328	11,122	430	13,014	13,790	2,447	2,338	368	3,010	3,184	820	420	4,963	11,871	11,866	91.2	86.0	1,143	895	301	626
Cinn., N O & Tex. Pac.	Oct.	337	2,685	55	3,056	3,252	594	595	126	690	691	255	87	920	2,490	2,402	81.5	73.9	566	291	453	603
	10 mos.	337	27,475	858	30,597	33,368	5,697	5,736	812	7,294	7,082	2,481	844	8,916	24,627	24,386	80.5	73.1	5,970	2,892	4,630	6,141
Georgia Southern & Florida	Oct.	397	664	20	792	868	133	132	12	67	69	11	23	266	549	561	69.4	64.6	243	36	59	58
	10 mos.	397	6,198	344	7,473	8,550	1,559	1,213	114	717	875	104	225	2,623	5,690	5,638	77.2	65.9	1,683	432	281	573
New Orleans & Northeastern	Oct.	203	785	27	902	861	197	214	24	206	199	101	28	280	789	813	87.4	94.4	113	73	92	35
	10 mos.	203	7,401	324	8,451	9,547	1,978	1,985	258	2,140	2,000	933	275	2,547	7,688	7,629	91.0	79.9	763	855	354	947
Southern Pacific	Oct.	7,955	39,893	1,693	44,021	47,384	5,157	5,495	524	9,764	10,785	2,591	768	17,438	35,373	36,621	80.4	77.3	8,647	4,432	3,702	4,328
	10 mos.	8,006	407,829	21,864	454,226	465,508	52,160	53,776	6,219	101,360	101,901	25,766	7,675	173,105	355,675	360,128	78.3	77.4	98,551	50,864	41,523	42,215
Texas & New Orleans	Oct.	4,091	10,046	258	10,941	11,511	1,684	2,077	170	1,850	1,752	198	268	4,041	8,445	8,887	77.2	77.2	2,496	618	522	582
	10 mos.	4,092	101,039	2,983	110,185	117,948	17,521	19,663	1,584	17,070	16,960	2,017	2,535	41,100	84,252	88,418	76.5	75.0	25,933	9,484	4,069	6,525
Spokane International	Oct.	150	247	...	258	282	47	74	8	22	24	10	4	73	157	190	60.8	67.4	101	56	16	6
	10 mos.	150	2,780	...	2,872	2,984	534	487	40	206	260	99	42	720	1,659	1,659	57.8	55.6	1,212	603	326	477
Spokane, Portland & Seattle	Oct.	936	2,653	61	2,894	2,905	457	459	57	464	449	129	36	1,070	2,145	2,122	74.1	73.1	749	247	377	746
	10 mos.	936	24,822	851	27,522	28,779	4,366	4,489	593	4,762	4,702	1,289	357	10,484	21,210	21,068	77.1	73.2	6,312	2,664	2,531	3,948
Tennessee Central	Oct.	284	327		359	355	46	50	5	53	45	21	15	107	260	255	72.4	71.9	99	25	26	33
	10 mos.	284	3,163	2	3,463	3,461	466	440	53	546	508	213	152	1,232	2,626	2,572	75.8	74.3	837	255	146	248
Texas & Pacific	Oct.	1,828	4,866	275	5,879	6,082	511	826	92	945	1,040	288	236	2,431	4,495	4,983	76.5	82.0	1,384	542	472	376
	10 mos.	1,828	50,473	3,258	59,996	61,922	6,355	8,273	994	10,455	10,578	2,820	2,326	25,133	48,046	50,271	80.1	81.2	11,950	4,763	3,106	3,252
Texas-Mexican	Oct.	161	208	...	240	277	69	60	6	37	33	11	13	85	228	208	94.9	75.2	12	10	—25	2
	10 mos.	161	2,506	...	2,785	3,076	487	605	62	347	335	114	126	839	2,037	2,205	73.1	71.7	748	345	115	138
Toledo, Peoria & Western	Oct.	239	624		646	687	68	84	7	53	56	13	52	178	393	414	60.8	60.2	253	106	69	79
	10 mos.	239	5,887		6,130	6,560	717	791	69	498	514	134	511	1,723	3,855	3,954	62.9	60.3	2,276	983	597	780
Union Pacific	Oct.	9,727	39,380	1,757	44,389	45,226	4,632	4,930	550	7,045	7,270	2,510	1,094	15,438	30,341	31,136	68.4	68.8	14,048	7,588	4,113	4,462
	10 mos.	9,744	358,351	23,282	411,805	430,655	44,747	51,647	6,359	75,125	79,908	24,237	11,761	146,357	300,644	317,807	73.0	73.8	111,161	65,559	26,403	31,047
Wabash	Oct.	2,413	8,773	303	10,180	10,816	935	1,251	129	1,164	1,419	488	319	4,572	7,447	8,376	73.2	77.4	2,732	679	1,114	872
	10 mos.	2,413	81,299	3,961	94,906	100,899	9,281	12,024	1,187	13,306	14,386	4,727	3,275	43,963	74,408	81,079	78.4	80.4	20,498	6,874	5,435	5,229
Ann Arbor	Oct.	294	762	1	770	768	70	85	7	177	169	42	19	324	612	684	79.4	89.1	158	50	93	
	10 mos.	294	6,860	1	6,995	7,384	660	892	59	1,574	1,614	442	273	3,333	6,067	6,723	86.7	91.0	928	541	193	134
Western Maryland	Oct.	841	3,469		3,674	2,602	623	522	56	802	758	308	126	1,282	3,022	2,690	82.2	103.4	652	361	627	287
	10 mos.	842	38,226		39,701	36,686	5,948	5,357	618	8,343	7,949	3,069	1,249	13,252	30,953	29,200	78.0	79.6	8,748	4,885	6,782	6,643
Western Pacific	Oct.	1,188	4,025	179	4,345	4,851	813	572	80	646	751	232	218	1,521	3,522	3,618	81.0	74.6	824	140	474	572
	10 mos.	1,188	41,095	2,087	44,312	45,100	6,140	5,547	818	6,899	6,921	2,182	2,494	16,208	35,078	34,138	79.2	75.7	9,234	3,932	4,507	5,445
Wisconsin Central	Oct.	1,031	2,559	17	2,823	2,535	457	354	45	430	412	110	102	1,256	2,408	2,179	85.3	85.9	415	207	128	—85
	10 mos.	1,031	25,666	247	27,863	27,279	3,299	3,742	451	4,333	4,429	1,095	1,056	12,034	22,570	22,460	80.5	82.3	5,492	2,009	1,257	928

* Includes figures for all periods for Delaware, Lackawanna & Western, with which Erie was merged effective Oct. 17, 1960.

MARKET OUTLOOK *at a glance*

Carloadings

Freight carloadings for the week ended Dec. 24 were not available as this issue went to press.

Loadings of revenue freight for the week ended Dec. 17 totaled 486,059 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Dec. 17

District	1960	1959	1958
Eastern	67,302	92,734	86,423
Allegheny	71,712	121,040	97,886
Pocahontas	40,307	55,764	52,300
Southern	101,853	116,630	109,322
Northwestern	57,213	70,786	62,736
Central Western	105,440	114,138	116,475
Southwestern	42,232	44,241	46,005
Total Western Districts	204,885	229,165	225,216
Total All Roads	486,059	615,333	571,147
Commodities:			
Grain and grain products	47,743	43,023	53,719
Livestock	4,345	4,846	4,438
Coal	96,010	121,759	127,316
Coke	5,413	11,954	8,868
Forest Products	33,694	40,725	35,102
Ore	11,210	32,105	13,605
Merchandise l.c.l.	27,121	37,193	40,270
Miscellaneous	260,523	323,728	287,829
Dec. 17	486,059	615,333	571,147
Dec. 10	517,653	642,865	589,353
Dec. 3	522,936	649,582	594,884
Nov. 26	471,400	574,229	539,489
Nov. 19	567,299	629,895	619,754
Cumulative total, 50 weeks	29,565,285	30,061,803	29,321,778

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Dec. 17 totaled 9,558 cars, compared with 8,673 for the corresponding 1959 week. Loadings for 1960 up to Dec. 17 totaled 536,523 cars, compared with 403,554 for the corresponding period of 1959.

IN CANADA. — Carloadings for the seven-day period ended Dec. 14 totaled 60,080 cars, compared with 58,151 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Dec. 14, 1960	60,080	24,811
Dec. 14, 1959	66,073	28,980
Cumulative Totals		
Dec. 14, 1960	3,507,830	1,328,998
Dec. 14, 1959	3,711,099	1,350,066

New Equipment

PASSENGER-TRAIN CARS

► *Toronto Transit Commission.*—Ordered 36 lightweight subway cars from Montreal Locomotive Works at a cost of $3,968,264. TTC said the bid submitted by the Montreal firm was the lowest of 10 received from companies in Canada, Britain, the U.S., Japan and West Germany. The new subway cars, reportedly the first to be built in Canada, will be 74 ft long. They will be constructed principally of aluminum. Delivery is scheduled for late 1962.

PIGGYBACK

► *Erie-Lackawanna.*—Is accepting delivery of 100 85-ft, roller-bearing piggyback flat cars from Bethlehem Steel Corp. Cars cost approximately $1,500,000, were originally part of a Trailer Train order.

SPECIAL

► *Burlington.*—Ordered 68 Motrac 64/12 radio units from Motorola for use on locomotives. Units are designed to operate directly from either 64- or 12-volt DC power source.

► *Great Northern.*—Ordered 24 two-way engine radios from Motorola. The radios have completely transistorized receiver and power supply and partially transistorized transmitter.

Capital Improvements

► *Santa Fe.*—Will spend about $65 million for capital improvements during 1961. Included in the modernization program is a second line change project in Arizona involving 37 miles of new main line, renewal of 234 miles of main track with continuously welded rail and the acquisition of 1,750 new freight cars.

Orders & Deliveries

► *Orders Decrease.*—Orders were placed in November for 3,680 new freight cars, compared with 5,885 in October. November 1959 orders totaled 2,424. Deliveries in November totaled 3,799, compared with 4,632 in October and 2,218 in November 1959. The backlog of cars on order and undelivered as of Dec. 1, 1960, was 22,781, compared with 22,900 on Nov. 1 and 36,555 on Dec. 1, 1959.

TYPE	ORDERED November, 1960	DELIVERED November, 1960	UNDELIVERED December 1, 1960
Box—Plain	750	1,216	4,210
Box—Auto	0	0	200
Flat	501	409	2,174
Gondola	900	456	4,371
Hopper	940	570	7,344
Cov. Hopper	48	156	783
Refrigerator	300	577	2,359
Tank	221	314	1,054
Caboose	0	29	34
Other	20	72	252
TOTAL	3,680	3,799	22,781
Car Builders	2,632	2,065	8,178
Railroad Shops	1,048	1,734	14,603

RLEA TO OPPOSE ALL MERGERS (*Continued from page 7*)

years ahead. Comparing the present period to that of the depression years, RLEA said: "Had the railroads been able to overcome the opposition of railroad labor and effect the then proposed consolidations, American railroads would have failed to meet the enormous demands for mass transportation in World War II."

While the RLEA was announcing its opposition to all pending proposals for rail mergers, merger news continued to make headlines. Here are the highlights of the recent merger developments.

● C&O/B&O: After winning acceptance of approximately 55% of B&O shares to C&O's exchange offer, C&O announced a plan to pay "dividends" to B&O shares committed to the C&O offer. The C&O plan, worth $1.69 per common share, will pay B&O holders at the same rate as C&O holders, if it is approved by the ICC. Coupled with announcement of the dividend plan was a statement that the acceptance period would be reopened from Jan. 3 to Feb. 2. C&O's goal: tax advantages that will accompany acquisition of 80% of B&O shares. C&O President Tuohy said immediate affiliation of C&O and B&O would produce savings of $23,000,000 from operations and a similar amount from commercial aspects. Mr. Tuohy recalled his previous offer to talk merger with NYC as soon as a C&O/B&O affiliation is completed, but stressed that C&O had no intention to make a new approach to NYC.

● PRR/Lehigh Valley: PRR, which now controls 44.4% of Lehigh Valley stock, though held in voting trusts, offered to acquire the remaining 55.6%. LV directors accepted the exchange offer, which calls for one PRR share for every 2⅜ shares of LV common. The offer is contingent on ICC approval of termination of the voting trusts. Initially at least, PRR would not seek a full-scale merger, but would operate LV as a subsidiary and would produce operating savings of $5,000,000 to $6,000,000 a year through coordination of services and other economies.

● MP/C&EI: An offer by Missouri Pacific to acquire the C&EI—and thus a Chicago outlet—through an exchange of stock was rejected by C&EI directors. The two roads had been studying merger for more than a year. Speculation now has C&EI linked with an eastern road (possibly NYC) or with a carrier entering Chicago from the northwest. The rather complex financial structures of MoPac and C&EI apparently put the hex on their proposed union.

● ACL/SAL: ICC hearings on the Seaboard/Coast Line merger proposal brought forth statements of intention from other roads. The Southern on Dec. 15 filed for authority to acquire the Central of Georgia in a move designed to protect itself in the event of ACL/SAL merger. Southern also said that if the ACL/SAL merger is approved, it should be permitted to gain control of the L&N. Illinois Central has also filed for permission to acquire control of L&N which is 34% owned by ACL.

● GN/NP/CB&Q/SP&S: Great Northern and Northern Pacific are expected in the near future to go before their stockholders and the ICC with a unification proposal involving the four roads.

● Rock Island/Milwaukee: A favorable report is expected soon on the advantages of a Rock Island/Milwaukee hook-up. Exhaustive studies have been made looking toward creation of a rail network that would stretch from the Great Lakes to the Pacific and the Gulf of Mexico.

● Western Pacific: Sought by both Southern Pacific and Santa Fe, WP's fate before the Interstate Commerce Commission may provide a clue to the Commission's position on rail consolidations as they relate to competition, transport efficiency and economy and the public interest. Both roads have promised to maintain WP as a separate operating company. WP isn't staying aloof; it has opposed SP and backed Santa Fe all the way so far.

● N&W/NKP/Wabash: The eventual three-way merger (beginning as a merger of NKP into N&W and lease of the Wabash) is expected to be presented to stockholders and the ICC for approval at an early date.

● Soo Line/Wisconsin Central/Duluth, South Shore & Atlantic: The former three CP affiliates start the new year as a unified company.

Railroads of the USSR and USA: A Comparison (1958)

	USSR	USA	USSR as % of USA
A. Plant:			
Total Route	76,056 mi[a]	218,500 mi	34.8
1. Route Electrified or Dieselized	12,737 mi	— — —	— —
2. CTC	1,245 mi[b]	27,141 mi[b]	4.5
3. Automatic Block Signaling	14,031 mi	81,743 mi	17.2
4. Locomotives (units)	34,327	29,560[c]	116.1
a. Steam	31,244[d]	1,387	2,252.6
b. Diesel	1,450	27,585	5.3
c. Electric	1,633	557	293.2
5. Freight Cars (physical units)	860,000	2,024,700	42.4
6. Passenger Cars (physical units)	53,000	28,560	185.6
B. Service:			
Freight traffic (billions)	891.8 t-mi	575 t-mi	155.1
Freight tons-originated (millions)	1,781.0 s.t.	1,187 s.t.	150.0
Passenger traffic (billions)	98.5 p-mi	23.6 p-mi	417.4
Passengers originated (millions)	1,800 p.	380.3 p.	473.3
Average freight haul	501 mi	484 mi	103.5
Average passenger haul	54.7 mi	61.5 mi.	88.9
C. Employees:			
Number (thousands)	2,285[e]	841[e]	271.7
Average annual earnings	9,950 r.	$5,860	
Productivity (traffic-mi per employee)	433,391 tr-mi[f]	711,771 tr-mi	60.9
Operating Revenue per Employee	29,616 r.	$11,367	
D. Financial:			
Net Investment (thousands)	149,100,000 r.[g]	$27,500,000	
Capital Investment (thousands)	11,700,000 r.	$738,038[h]	
Operating Revenue, freight (millions)	52,054 r.	$8,357.6	
Operating Expenses, freight (millions)	38,149 r.	$5,898.2[i]	
Operating Ratio, freight (%)	73.3	70.6	103.8
Operating Revenue, passenger (millions)	15,619 r.	$1,202.0	
Operating Expenses, passenger (millions)	10,746 r.	$1,641.1	
Operating Ratio, passenger (%)	68.8	136.5	50.4
E. Operations:			
Average Tons per car (net)	27.8 s.t.	33.0 s.t.	84.2
Average Tons per freight train (net)	1,260 s.t.	1,430 s.t.	88.1
Average speed of freight trains (incl. stops)	16.5 mi/hr	19.2 mi/hr	85.9
Net ton-mi per freight train hour	20,790 t-mi/hr	27,456 t-mi/hr	75.7
Freight traffic density (billion)	11.7 t-mi/mi	2.6 t-mi/mi	450.0

[a] Abbreviations: mi—miles, t—tons, s.t.—short tons, r—rubles, p—passengers, tr-mi—traffic miles. Sources are official ICC and MPS (Ministry of Railroad Transportation—USSR) statistics. Some adjustments were necessary to establish comparability.
[b] Figures for both US and USSR are for 1957.
[c] US total includes 31 other types, including gas-turbines.
[d] Ton-miles by steam in USSR have been declining since March 1958 and steam locomotives are now being taken out of mainline service as replacements are available.
[e] Total employees of the USSR Ministry of Railroads was adjusted for comparability with US.
[f] Comparable labor force estimates deflate published Soviet productivity based on non-comparable "operating personnel." Unit is passenger plus ton-miles.
[g] USSR excludes land value except for improvements. US includes assets incidental to railroad operation and excludes leased equipment. Official rate of exchange is 4 rubles to the dollar; tourist rate, which many consider more realistic, is 10 rubles to the dollar.
[h] US 1958 figure is abnormally low. Average for last 10 years was about 1 billion dollars.
[i] Excludes taxes and rents for US.

1961: Second-Half Recovery?

► **The Story at a Glance: Railroads eased into 1961 with high hopes for the new year, and sighs for the old. The AAR estimates that 1960 net income fell to $450 million — lowest since 1949's $438 million. The first half of 1961 isn't expected to be much better, but a "genuine upturn" is expected in the second half.**

An otherwise dreary railroad scene showed two bright spots in 1960:

- Piggyback continued its steady climb. Total trailer-on-flat car traffic rose approximately 33% above 1959.
- The long decline in railroad passenger travel showed signs of leveling off. "Although the volume for the year is now estimated at 21.3 billion passenger-miles, 3½% less than in 1959," noted AAR President Daniel P. Loomis, "the drop was due primarily to strikes that tied up two major passenger-carrying lines."

But in the profit column the news wasn't so bright.

Net income dropped to an estimated $450 million, some $128 million below that of 1959 and the lowest in a decade. Rate of return on net investment declined to less than 2.25%, compared with 2.72% in 1959 and an average of 3.65% for the 1950-1959 period.

Despite the drop in earnings, the industry spent an estimated $950 million for capital improvements in 1960, a 16% increase over 1959.

What lies ahead? Most industry spokesman were cautious but hopeful last week.

"While the first half of 1961 will probably show little improvement, the industry looks for the start of a genuine upturn in the second half," said AAR President Loomis.

"Looking ahead to 1961 and beyond, railroadmen are encouraged by several factors," said Mr. Loomis. "Vast changes are being made in the railroads' plant and operating methods to enable them to do a better job for the public. The public, in turn, is becoming increasingly aware of the destructive inequities the railroads are up against in the government's treatment of the various forms of transportation.

"Railroads see signs of recognition of their great need for relief from some of the repressive taxes they are forced to pay and the equal need for relief from some of the shackles of outdated government regulation. There is also growing public recognition of the need to collect adequate user charges from the commercial carriers who benefit from mounting government spending for highways, airways and waterways."

Clair M. Roddewig, president of the Association of Western Railways, finds 1961 "clouded with many uncertainties."

"Railroad business always follows the ups and downs of our overall economy, and should industrial activity turn up at mid-year as forecast by many economists, then 1961 could show a gradual improvement in railroad business and earnings," Mr. Roddewig said in a year-end statement."

He predicted that piggyback will continue to grow at the fast pace set in recent years. He also saw intensified competition among the various modes of transport for available traffic, to the benefit of shippers.

"The railroads enter 1961 fully prepared to handle the business offered to them with a supply of freight cars adequate to meet all anticipated requirements," said Mr. Roddewig. "The use of specialized types of freight cars will continue to increase during 1961 as it has in 1960 and prior years."

Santa Fe President Ernest S. Marsh predicted a "significant pick-up in general business conditions with a corresponding increase in freight carloadings and total revenues."

Great Northern President John M. Budd is "both optimistic and apprehensive" about the future. "On the favorable side for 1961," he said, "we believe the railways in our region will have a modest increase in traffic volume." He said he was also heartened by the appointment of the Presidential work rules study commission, and by the trend toward consolidation. But "on the negative side, the lack of a modern, realistic national policy on transportation continues to needlessly cost this country millions of dollars every year."

Norfolk & Western President S. T. Saunders finds it "difficult" to predict the level of 1961 business. "The downward trend will carry over into the new year," in his opinion. "Yet the country's business activity continues at a relatively high level and I am confident that the necessity for replacing inventories plus increased governmental spending will stimulate improvement."

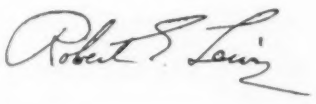
U. S. Steel Chairman Roger M. Blough says prospects for the steel industry are "better than they have been for some time. Even should the present lull in business activity continue for the next few months, spring should bring normal seasonal gains in steel use in construction, agriculture, canning and railroad work. This, plus the end of inventory liquidation, indicates some increase in steel output. When the nation once again experiences a resurgence in total economic activity—and this could happen not too many months away—further gains in steel output would result."

Capitalism and Socialism Don't Mix

"The essence of efficiency in railroad transportation is the effective use of the freight car," Mr. Beschev, Russian Minister of Railways told Railway Age (*see page 12*). He blamed the capitalistic system for the relatively ineffective use of freight cars in this country, and touted the socialistic system for the planned transport that permits such high utilization of the freight car in the USSR.

Well, he is dead right on the "essence" but dead wrong in blaming the capitalistic system for the failure. The system that has failed is a horrible admixture of capitalism and socialism. It is a special admixture that does not obtain in other American industry where we are generally so far ahead of socialist nations. If the American railroads—about as capitalistic as anything in this country—were in competition with true capitalistic transport, you would see the most efficient, most effective use of freight cars anywhere in the world. But as long as competitive transport is partially socialized, the strength and vigor of pay-your-own-way railroads will continue to be suppressed.

If Mr. Kennedy and company is to compete effectively with Mr. Khrushchev and associates he can contribute importantly by helping create equality in American transport.



Donald T. Martin
ACL

John F. Kerslake
C&O

Hays T. Watkins, Jr.
C&O

Kent C. Van Wyck
GN

People in the News

ASSOCIATION OF AMERICAN RAILROADS.—The Operations and Maintenance Department, including its Car Service Division, was reorganized, effective Jan. 1. **J. J. Kelley,** vice-chairman, Car Service Division, appointed manager, railroad relations, Washington, D.C., succeeding **Walter L. Harvey,** retired. Mr. Kelley's former position abolished. **C. A. Lauby,** manager of port traffic and Car Service Division district manager at New York, named executive vice-chairman, Operations and Maintenance department's Operating-Transportation division, at Washington, succeeding **A. I. Ciliske,** of Chicago, retired. Mr. Ciliske will be retained as a consultant. **H. G. Randall,** district manager, Detroit, succeeds Mr. Lauby at New York. Supervision of the Detroit office area has been transferred to Pittsburgh, though the field secretary, Great Lakes Region Rail Shippers Advisory Board, will remain at Detroit. **Paul C. Brown,** assistant to chairman—advisory boards, Car Service Division, transferred to the Operating-Transportation division, Washington, as assistant to executive vice-chairman. **R. S. Harlan,** chief clerk, Car Service Division's Washington office, replaces Mr. Brown with the title of assistant-advisory boards. **R. H. Buchanan,** district manager, Seattle, appointed assistant district manager, Pittsburgh. Operation of the Seattle district transferred to Minneapolis, except for the state of Oregon, which will be supervised by the San Francisco district office. The field secretary, Pacific Northwest Shippers Advisory Board, remains at Seattle. The number of Car Service Division district offices has been reduced from 13 to 8. The staff of car service agents and shippers advisory board field secretaries will remain unchanged.

In the Operating-Transportation division, all but three sections have been consolidated into a system of advisory committees reporting to the General Committee. Affected are the Operating, Protective, Freight Station, Communications, Medical & Surgical, Safety, Fire Protection & Insurance and Railway Sanitation Sections. General Committee headquarters have been transferred to Washington, under direction of Mr. Lauby. A small staff will remain in Chicago to handle advisory committee matters and will be headed by **W. E. Todd,** staff secretary. Assisting him will be **F. J. Parker,** secretary of several of the present Operating-Transportation division sections, and **R. L. Rose.** The Transportation Section will continue as part of the Operating-Transportation division, with headquarters in Chicago. **C. L. Schmitt** will succeed **H. A. Eaton** as secretary of the Section following Mr. Schmitt's retirement.

The Communications Section has been consolidated with the Signal Section, Engineering Division. **A. H. Grothmann,** secretary, Communications Section, named secretary of the combined operation at Chicago. Signal Section Secretary, **R. H. C. Balliet,** has retired. Officers of the Communication and Signal Section are: Chairman, **R. C. Steele,** engineer of signals, Canadian Pacific; 1st vice-chairman, **S. W. Miller,** superintendent of communications, New York, Chicago & St. Louis; 2nd vice-chairman, **H. B. Garrett,** signal engineer, Southern Pacific; engineer communications and signals, **L. E. Kearney;** assistant engineer communications and signals, **P. H. Foley.**

C. C. Elber has retired as secretary, Electrical Section, Engineering and Mechanical divisions. Functions of the section will be absorbed by the two divisions.

J. C. Hindman appointed secretary, Freight Claim Division, succeeding **R. E. O'Donnell,** retired. **J. P. Duffy** named chief examiner, Freight Claim Review Bureau, replacing **E. J. Fisher,** retired.

The Freight Loss and damage Prevention Section, Operating-Transportation division, has been reassigned to its original place with the Freight Claim Division. **C. A. Naffziger** continues as director of the Section.

The Freight Loading and Container Bureau, Operating-Transportation division, returns to the Bureau of Explosives, with **Burton Williams** remaining as chief engineer. **V. S. Boomer, K. E. Rion** and **J. E. Roumillat** will be transferred to Chicago from field offices of the Freight Loading and Container Bureau, and such field activities will be assumed by local Bureau of Explosives personnel.

Functions of the Joint Committee on Railway Sanitation will be consolidated into the Operating-Transportation division advisory committee system. Only minor changes will be made in other divisions of the Operations and Maintenance department.

ATLANTIC COAST LINE.—Donald T. Martin, director of public relations and advertising, Jacksonville, Fla., appointed assistant vice president—public relations and advertising.

R. F. Murphy, assistant to general superintendent transportation, Jacksonville, appointed assistant general superintendent transporation. **M. L. Wadsworth,** transportation assistant, succeeds Mr. Murphy. **R. L. Lightfoot,** division superintendent, Tampa (Fla.) division, transferred to the Western division at Atlanta, Ga., succeeding **B. B. Vaughan,** who replaces Mr. Lightfoot.

CANADIAN PACIFIC.—R. D. Matthews, general passenger agent, Toronto, Ont., appointed passenger traffic manager, Montreal, Que., succeeding **H. A. Lee,** who retired Dec. 31, 1960. **A. K. Stewart,** assistant general passenger agent, Winnipeg, succeeds Mr. Matthews as general passenger agent, Toronto.

A. McDermott appointed manager, department of insurance and fire protection, Montreal, succeeding **H. W. Dunn,** who retired Dec. 31. **G. A. Harman,** chief clerk, department of insurance and fire protection, succeeds Mr. McDermott, assistant to manager.

R. A. Spencer, assistant engineer, Laurentian division, named assistant division engineer, Montreal Terminals division, succeeding **W. M. Price,** transferred.

CANTON.—H. J. Watt, president, Baltimore, Md., resigned effective Dec. 31, 1960.

CHESAPEAKE & OHIO.—John F. Kerslake, assistant vice president—treasurer, Cleveland, Ohio, appointed assistant vice president and will be second in command of the finance department. **Hays T. Watkins, Jr.,** assistant treasurer, named treasurer.

Frank P. Pattison, assistant general coal traffic agent, Cleveland, appointed general coal traffic agent there. **Arthur F. Bryan,** coal traffic agent, Grand Rapids, Mich., named assistant general coal traffic agent there.

William E. Stone, chief clerk to operating vice president, appointed passenger trainmaster, Huntington, W. Va.

Charles N. Page, assistant freight traffic manager, Cincinnati, promoted to freight traffic manager there, succeeding **A. M. Glassmeyer,** who retired Dec. 31. **Charles R. Sargent,** assistant freight traffic manager, Chicago, transferred to Cincinnati, to succeed Mr. Page.

CHICAGO SOUTH SHORE & SOUTH BEND.—W. P. Coliton, vice president and general manager, elected president, to succeed **D. E. Ferner,** retired. Mr. Coliton will retain the title of general manager.

COLUMBUS & GREENVILLE.—A. S. Thompson, purchasing agent and storekeeper, Columbus, Miss., retired Dec. 31, 1960, after 51 years of railroad service.

DELAWARE & HUDSON.—Raymond D. Cummings, manager of purchases and stores, Albany N. Y., retired Dec. 31.

FLORIDA EAST COAST.—Due to the elimination of the purchasing department, the positions of manager and assistant manager, purchases and stores, St. Augustine, Fla., were abolished effective Dec. 15, 1960. **John Lembach,** manager, purchases and stores, was employed by the FEC for 47 years. **F. A. Leeker,** assistant manager, purchases and stores, has had 44 years of service.

GREAT NORTHERN.—Kent C. Van Wyck, general passenger agent, St. Paul, appointed passenger traffic manager, succeeding **P. G. Holmes,** retired. **Frank L. Strecker,** district passenger agent, St. Paul, named assistant general passenger agent.

SOO LINE.—Merger of the Minneapolis, St. Paul & Sault Ste. Marie; Wisconsin Central; and the Duluth, South Shore & Atlantic, effective Jan. 1, brought about the following appointments: **Ben G. Spears,** general freight traffic manager—sales and service, MStP&SSM, appointed executive representative—traffic of the new Soo Line. **James T. Hartnett,** freight traffic manager—sales and service, MStP&SSM, will direct the sales division of the new company as general freight traffic manager—system. **Arthur C. Stenberg,** general freight traffic manager, DSS&A, named general freight traffic man-

ager—western sales, Seattle, **Kenneth H. Peterson**, freight traffic manager, MStP&SSM, Chicago, appointed freight traffic manager—eastern sales, Chicago. **George B. Shimek**, traffic manager of the MStP&SSM, Minneapolis, will continue to hold that title. **John B. Benson**, assistant traffic manager, MStP&SSM, St. Paul, appointed traffic manager, Minneapolis. **John Holloway**, assistant traffic manager, MStP&SSM, Milwaukee, named traffic manager, Chicago. **Arthur O. Plunkett**, traffic manager, MStP&SSM, New York, will have supervision over both the New York and the new Philadelphia agencies. **Curtis O. Norwick**, traffic manager, MStP&SSM, Minneapolis, becomes traffic manager at St. Paul. **Bernard Levenduski**, general agent, DSS&A, Duluth, appointed traffic manager—rail-van and merchandise services, Minneapolis, succeeding **Russell F. Berndt**, appointed assistant to general freight traffic manager.

The new Soo Line's marketing division will be built on the structure of the MStP&SSM's rate, research and agricultural departments, under **Kenneth J. Sherwood** as general freight traffic manager—marketing.

Pricing will be supervised by the rate department under **Ray H. Smith**, freight traffic manager. **Henry J. Beaudry**, general freight agent—rates, DSS&A, appointed general freight agent—divisions, of the new Soo Line. The agricultural research phase of the marketing division will be handled, as at present, by **Claude O. Ebling**, general agricultural agent. Industrial development will be handled, as at present, by **George T. Bergren**, industrial and real estate commissioner. Other traffic department officers of the MStP&SSM will assume similar positions in the traffic department of the new company.

The new Soo Line's agencies will have sales staffs as follows: Birmingham, Ala.: **Jerome F. Schadewald** (MStP&SSM), general agent. Bismarck, N. D.: **John D. Senn** (MStP&SSM), general agent. Boston, Mass.: **Joseph T. Ryan** (DSS&A, Pittsburgh), general agent. Buffalo, N.Y.: **John B. Campbell** (MStP&SSM), general agent. Chicago, Ill.: (All formerly with the MStP&SSM) **Douglas T. Walen**, assistant traffic manager; **Ward S. Glover**, district freight agent; **Harley T. Mitchell, Jr.** (Portland, Ore.), general agent. Cleveland, Ohio: **John F. Smullen** (MStP&SSM, Chicago), general agent. Detroit, Mich.: **Melvin P. Petrie**, (MStP&SSM), district freight agent; **Harold H. Wentzel** (DSS&A), general agent. Duluth, Minn.: **Burton Hermanson**, (MStP&SSM), assistant traffic manager; **Paul W. O'Brien** (MStP&SSM), general agent, Eau Claire, Wis.: **Malcolm A. Wigg** (MStP&SSM), general agent. Edmonton, Alta., **William S. Gregg** (MStP&SSM), general agent. Eugene, Ore.: **Robert J. Riopelle** (DSS&A), Portland, general agent. Los Angeles, Calif.: **James F. Rice** (MStP&SSM), general agent. Marquette Mich.: **Wesley E. Perron** (DSS&A), assistant traffic manager. Menasha, Wis.: **Erhardt E. Widmer**, (MStP&SSM), assistant traffic manager; **Arthur V. Spanbauer** (MStP&SSM), general agent. Milwaukee, Wis.: **Allan K. Miller** (MStP&SSM, Cleveland), assistant traffic manager; **Edgar B. Last** (MStP&SSM), general agent. Minneapolis, Minn., **Horace K. Willson** (MStP&SSM), assistant traffic manager; **Peter W. Auren** (DSS&A), district freight agent; **Robert J. McCormick** (MStP&SSM), general agent, Minot, N.D.: **Robert T. Nelson** (MStP&SSM), assistant traffic manager. New York: **Frederick L. Meyer** (MStP&SSM, district freight agent; **William H. Schenk** (MStP&SSM, Boston) and **Charles H. Schroeder** (DSS&A), general agents. Philadelphia, Pa.: **Raymond T. Waltz** (MStP&SSM), general agent. Pittsburgh, Pa.: **Gordon A. Johnstone** (MStP&SSM), general agent. Portland, Ore.: **Alan V. Hokanson** (DSS&A), general agent. St. Paul, Minn.: **Walter W. Drumb** (MStP&SSM), general agent. San Francisco, Calif.: **Howard E. Salo** (MStP&SSM), general agent. Sault Ste. Marie, Mich.: **R. Earl Howard** (MStP&SSM), general agent. Seattle, Wash.: **Ross O. Hambly** (DSS&A), general agent. Spokane, Wash.: **Henry W. Monson**, general agent. Thief River Falls, Minn.: **Vernon C. Erickson** (MStP&SSM), general agent. Toronto, Ont.: **Murray R. Gray** (MStP&SSM), general agent. Vancouver, B.C.: **Ernest Jacquest** (MStP&SSM), district freight agent; **Harold J. Glanville** (DSS&A), general agent. Washington, D.C., **John G. Quick** (MStP&SSM), general agent. Winnipeg, Man.: **Arthur C. Cook** (MStP&SSM), general agent.

Joint Soo Line-Canadian Pacific agencies will be maintained at Omaha, Kansas City, Dallas, St. Louis, Cincinnati, Indianapolis, Memphis and New Orleans.

Supply Trade

The Johnson Rubber Co., manufacturer of VulcaBond rail joints, has established a Railroad Sales division, headed by **Richard E. Morrison** as sales manager at Middlefield, Ohio. The new division will handle the marketing, sales promotion and research and development activities related to all railroad products. Mr. Morrison has been a mechanical division sales engineer in the company's Chicago district for the past nine years.

T. R. Elmblad and **A. C. Kukral** have been named managers of **Whiting Corp.'s** New York Domestic and Cleveland sales offices, respectively. Both were formerly in the Cleveland office, Mr. Elmblad as manager. **R. J. Enroth** moves from the Chicago office to New York Domestic and **F. R. Schwantes** from Chicago to Cleveland.

Arthur Hoogerhyde has been appointed manager, Project Engineering department of **Union Switch & Signal—Division of Westinghouse Air Brake Co.**, succeeding **C. W. Bell**, retired. Mr. Hoogerhyde was formerly a section engineer, Centralized Traffic Control Section.

Thomas Truck & Caster Co., Keokuk, Iowa, has appointed the following railroad representatives to sell their industrial trucks, trailers, casters, wheels and skids: **Black & Coulton, Inc.**, 1836 Euclid Ave., Cleveland, Ohio; **Roth Railway Supply Inc.**, 2235 St. Mary's Ave., Omaha, Neb. (with branch office in Denver, Colo.)

Philip W. Scott has been elected executive vice president and board member of the **Budd Co.**, Philadelphia, Pa., succeeding **Ernest R. Schmidt**, retired.

Union Carbide Development Co., Division of Union Carbide Corp., has appointed **U.S. Railway Equipment Co.**, 231 South La Salle Street, Chicago, to handle ULOK panel air filters throughout the railroad industry.

George B. Coffey, Chicago division manager, **A. M. Byers Co.**, promoted to central regional manager, Chicago.

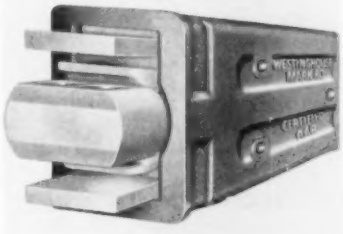
Robert F. Bogan has been named manager, industrial marketing, **Pullman-Standard** division of **Pullman Inc.**

OBITUARY

John Marshall, 74, assistant grand chief engineer, **Brotherhood of Locomotive Engineers**, died Dec. 8 in St. Boniface Hospital, St. Boniface, Man., Canada.

Lading Damage

Reactions to the Railway Age special report ('Hardware' Helps Cut Damage to RR Freight—RA, Dec. 19/26, p. 18) included requests for inclusion of the following two products. The article has aroused new interest among railroad officers and suppliers in the important and continuing job of damage reduction. The editor of the company magazine for a major Class I road will adapt the article for use in a forthcoming issue of his publication. A large supply company has requested reprint prices, and extra copies of the article have been requested by still another railroad.



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Transco Stage Loading system of Transportation Specialties Co. offers three types of belt rails for ½-in. crossbar adjustment. Rails can be permanent or adjustable.

You Ought To Know...

Railroad nationalization is foreseen by the Boston Herald in a Dec. 26 editorial—not because the paper favors the move but because "there are worse things than nationalization." Two such worse things: "No railroads at all, or railroads like those serving Boston that serve inadequately." The paper goes on to say that railroads could work effectively under private enterprise if local, state and national governments would let them—"but what needs to be done runs into hopelessly powerful opposition," especially the "lobbies representing rival transportation, notably trucking."

A new strike date—May 16—has been set by the Canadian non-ops' joint negotiating committee. The deadline, which follows by one day the expiration of the six-month ban set by the government in the current wage dispute with Canadian railroads, is expected to be confirmed by the unions' General Conference Committee Jan. 24.

Success came quickly to L&N's budget sleeping car plan, which was started Dec. 1 on alternate nights between Cincinnati and Memphis (RA, Nov. 14, 1960, p. 48). Demand for space on the budget car (bed room, roomette and section accommodations for coach fare plus space charge) has made daily service necessary.

The 15th Institute on Railroad Management will be held at American University, Washington, D. C., Jan. 9-Jan. 19. The program is designed "for middle-management personnel desiring to prepare for larger responsibilities," and applications for admission should be addressed to American University, 1901 F St., N.W., Washington 6. Marvin L. Fair, professor of transportation at the university, is director of the institute.

The financial beating railroads often take in personal injury damage suits may become less painful in Cook County, Ill., where juries are normally among the most generous in the country. A liability suit may be filed in any county where the defendant corporation maintains an office, and Cook County courts have been handling such cases if the accident occurred within 500 miles of Chicago. But a circuit court judge has dismissed a complaint originating in CB&Q's Burlington, Iowa, shops on the grounds that Cook County courts are not a "convenient forum." Burlington is about 200 miles from Chicago.

Sales theme for the new Soo Line will be two-fold: "Full utilization of the company's potential for fast and reliable service, together with increased use of up-to-date marketing tools." Basic structure of the old Soo traffic department will be used for the merged company, with staff realinement promoting full use of modern marketing techniques; a new staff supervisory position at Seattle, Wash., to oversee eight western agencies; new traffic offices at Philadelphia, Pa., and Eugene, Ore.

New York City's commuter problem will be studied for the Senate Committee on Interstate and Foreign Commerce by Regional Plan Association, Inc., of New York City. The Committee will pay $40,000 for a one-year study of commuter problems besetting the New York-New Jersey-Connecticut area.

Proposed discontinuance of C&NW's overnight passenger service between Chicago and Duluth will be delayed four months pending ICC investigation and hearing. Operation of trains 514 and 515 between Elroy, Wis., and Mankato, Minn., will cease on Jan. 4 as planned.

Owner lines of the Chicago & Western Indiana are the C&EI, Erie, Grand Trunk, Monon and Wabash. Santa Fe is not an owner (as reported in RA, Dec. 19/26, 1960, p. 52), although it is represented on the C&WI's board of directors.

Two passengers were killed and 81 injured in train and train-service accidents in October 1960, according to the ICC's preliminary report. This compares with no fatalities and 112 injuries in October 1959. Passenger fatalities in last year's first 10 months totaled 29, compared with nine in the like 1959 period. Fifteen employees on duty were killed and 1,115 injured in October 1960, compared with 17 killed and 1,152 injured in October 1959. Employee fatalities for the 10-month period totaled 148 in 1960 and 130 in 1959.

Substantial gains from sales of land and federal income tax refunds, reported by C&NW in earned surplus rather than in the income statement, are now being shown on North Western financial reports under a heading Net Income and Special Credits. For the 11 months ended Nov. 30, 1960, C&NW reported $5,200,000 in Special Credits and a net income of $591,813.

Burlington Truck Lines, Inc., a CB&Q subsidiary, has acquired under lease the operation of H. B. Green Transportation Line, Inc. Green has operating rights over nearly 600 route miles in Iowa and Illinois with terminal facilities at Davenport and Burlington, Iowa.

"Pick-a-back" service on the Trans-Australian Railway has regained "considerable traffic which was being conveyed by road, and has proved a successful counter to road competition," according to the road's 1959-1960 annual report. The railway runs from Port Pirie Junction in South Australia to Kalgoorlie in Western Australia, 1,108 route miles.

Purdue University's ninth annual on-campus course in industrial packaging will be held March 20-31, 1961. Information and registration blanks are available from M. E. Ocker, Division of Adult Education, Memorial Center, Purdue University, Lafayette, Ind.

Intercity truck tonnage dropped in October. It was 4.3% below October 1959 and 4.7% below September 1960, according to the American Trucking Associations.

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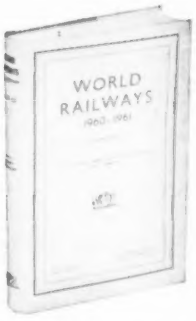

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Research + Inaction = Zero

When the U.S. took over the Virgin Islands, thirty or more years ago, some wit announced that "the Marines have landed and have the situation well in hand."

A parallel observation might now be made about the nation's transportation mess—the National Academy of Sciences (National Research Council) has moved in on it and order will now rapidly replace chaos. Or would that conclusion, maybe, be a trifle premature?

The National Academy's excursion into transportation was initiated at a month-long conference at Wood's Hole, Mass., last August (reported in a recently issued 100-page pamphlet). Those invited were, primarily, people of scholarly inclinations, including a considerable number of academic authorities—the type often irreverently designated as Eggheads. (There were some transportation people there, also, who would certainly not fall into the academic category—but the tone of the sessions, and the report thereon, had a distinctly "high-brow" flavor).

This paper by no means belittles the so-called Eggheads or the influence they wield on national policy—quite the contrary. Such fellows really steer the ship of state, when they get to work at it—but they usually operate by delayed action. The New Deal was thoroughly cooked up on college campuses over a period of ten years before Roosevelt came along to dish it out to the public. Almost any major course of government action will find its antecedents in similar scholarly study and palaver.

One of the reasons—perhaps *the* reason—why national transportation policy has drifted into the mess it's in, is the strange and even suspicious inattention to it of top-flight economic scholarship during recent years. They have left a phase of our economy that accounts for one-fifth of all expenditure in the hands of specialists who, able as they are, do not appear on page 1 in the newspapers. So, having the National Academy set up shop on transportation is a welcome event; and one long overdue.

The question that now arises is this: Is the National Academy going to bring order into transportation for our grandchildren—or would it be willing to provide us with a formula for, at least, a partial solution in 1961?

The country just can't wait another 5 or 10 years for at least half-way correction of some of its critical transportation situations—for example, the deficits of some of the commuter operations; the growing uneconomic diversion of freight traffic to unregulated carriers and to toll-free barge operations; and the inadequacy of investment capital for railroad replacements and improvements.

Some of these acute transportation troubles have been thoroughly researched already—and the necessary corrective steps are as clearly delineated now as they could possibly be after another decade of mathematical model-making and computer programming and calculation.

The National Academy should not waste precious time by starting its studies from scratch—but should build its analysis on the foundation of such findings already available as those of the Brookings Institution report by Professor James Nelson ("Railroad Transportation and Public Policy") and the Commerce Department pamphlet, "Rationale of Federal Transportation Policy" (by E. W. Williams and D. Bluestone). And General Doyle's studies for the Senate Interstate Commerce Committee, to be completed shortly, will also probably offer some important recommendations which should be acted on at once.

Some of the most acute transportation problems have been researched, re-researched, probed, tested, argued, iterated, and reiterated *ad infinitum* (and even *ad nauseam,* to some people).

The fact is that there is too much researching being done solely for the archives. Research which is not provided with effective machinery to get its findings translated into action is just plain waste. Indeed, it is worse than waste, because it lulls people into the belief that important problems are being solved, when they are actually becoming worse. The National Academy recognizes this danger, because in its report it observes that "transportation facilities unable to earn an attractive return under present arrangements may be scrapped . . ."

Precisely that is happening today. It will keep on happening and grow worse until a clamor is raised which will get the results of expert analysis of transportation problems converted into action. It is the duty, particularly, of railroad people to lead this agitation, because, after all, it is they who are the principal victims of the present course of dawdle and delay and debate and dissemble.

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